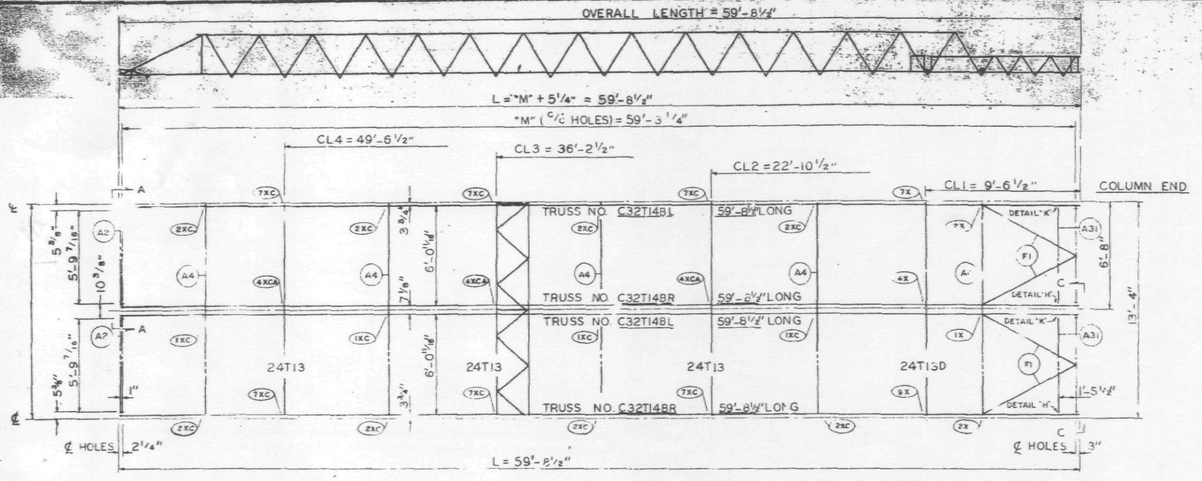
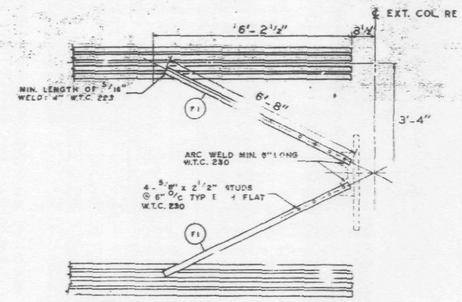
0800-0899

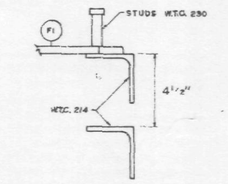
WTC1-131-LERA



PANEL NO. B7B SIZE 13'-4" x 59'-3 1/2"

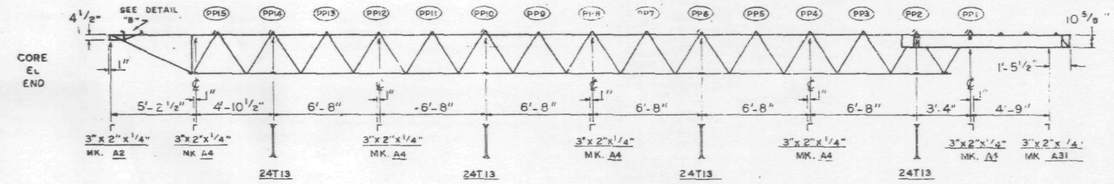


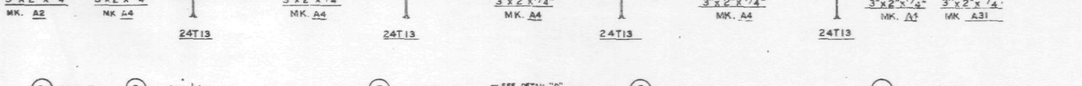
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FL ATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

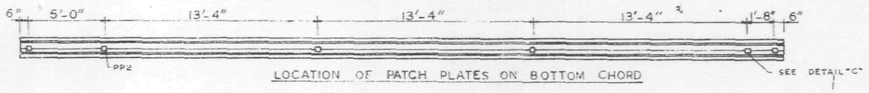
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	2	C32T14BL x 59'-8 1/2"	ST 214BL
	T14BR	2	C32T14BR x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x 5'-11 9/16"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
	A31	2	3"x2"x1/4"x5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/2"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2" x 1 1/2" x .25" x 6"	ST 400
"8 SHEAR ANCHOR	SA2	4	"8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400
	P8	4	3" x 1/2" x 1'-2"	ST 409



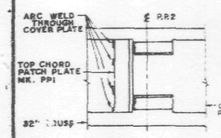


COVER PLATE PLACEMENT

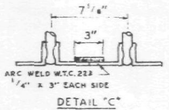
LOCATION OF PATCH PLATES ON TOP CHORD



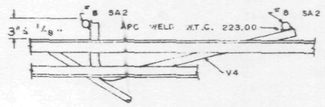
LOCATION OF PATCH PLATES ON BOTTOM CHORD



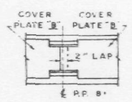
TOP VIEW - DETAIL "A"



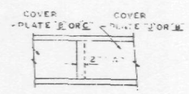
DETAIL "C"



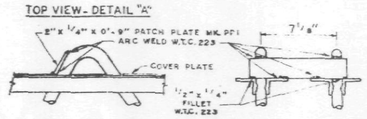
DETAIL "B"



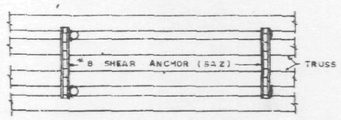
DETAIL "D"



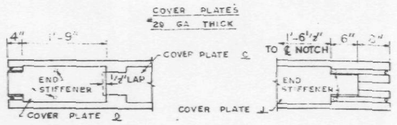
DETAIL "E"



DETAIL "A" SECTION B-B

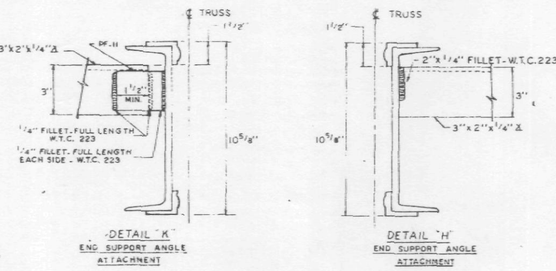


TOP VIEW DETAIL "B"



DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

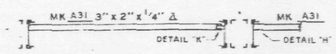


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

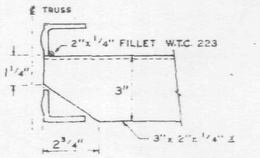
DETAIL "H" END SUPPORT ANGLE ATTACHMENT

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (3X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

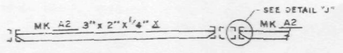
A = 1/4"
B = 1/4"



SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-26	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SB-124	7-24-69
7-AB3-24	8-15-68

Void

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 92 (WEST)

PANEL B7B - 13'-4" x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-26 PLATE

APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A. DATE ____

DRAWN BY LwR DATE MAY 8, 1969

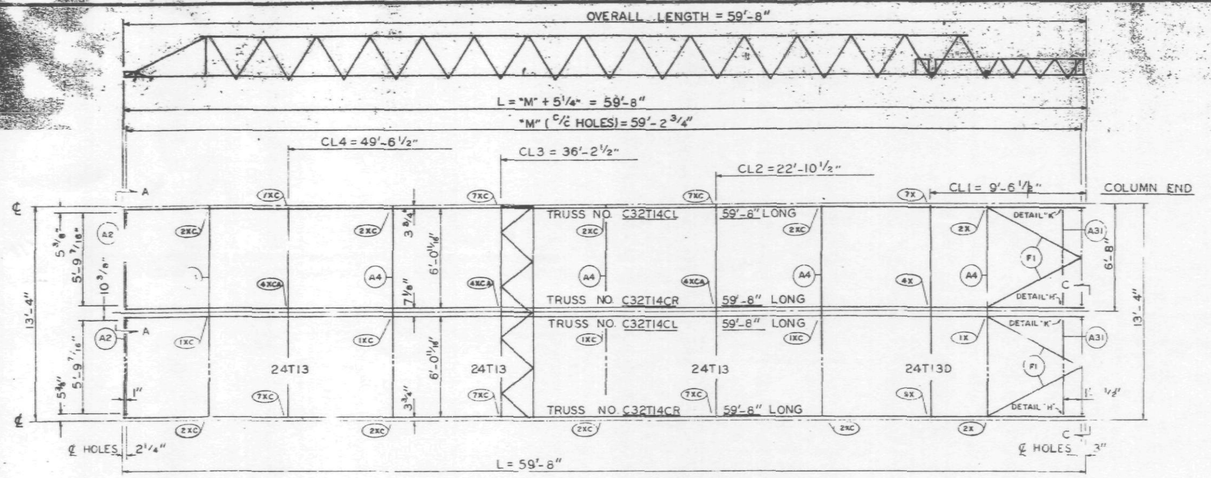
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR DATE ____

CHECKED BY T.N. CHURA DATE MAY 8, 1969 IN CHARGE OF PROD. DEV.

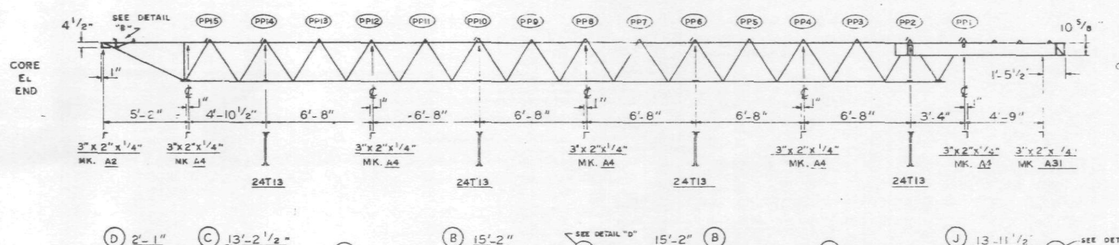
DETAILED LACLEDE STEEL CO.

FABRICATION CONT NO W.T.C. 221

SHEET NO FP B7B

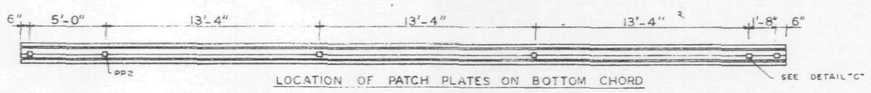


PANEL NO. B7C SIZE 13'-4" x 59'-8"

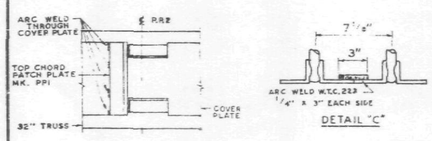


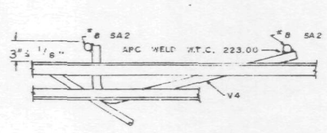
COVER PLATE PLACEMENT

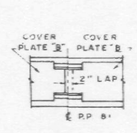
LOCATION OF PATCH PLATES ON TOP CHORD

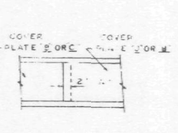


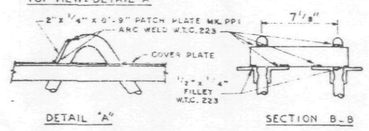
LOCATION OF PATCH PLATES ON BOTTOM CHORD

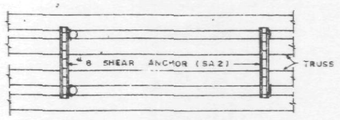


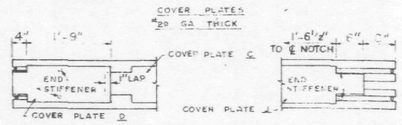




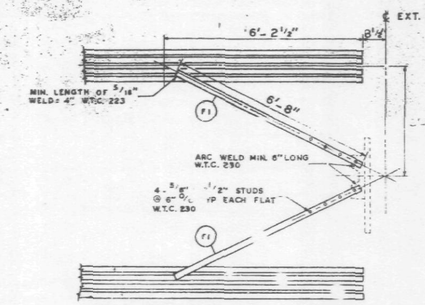




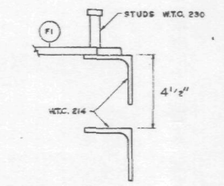




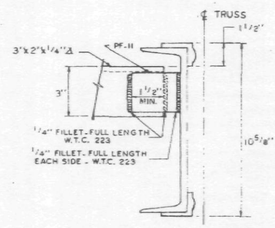
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



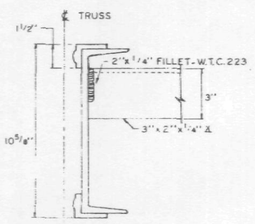
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLA.S 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

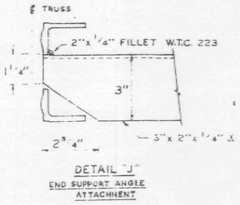


DETAIL K
END SUPPORT ANGLE ATTACHMENT

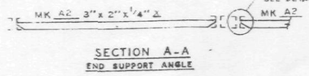


DETAIL H
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE



DETAIL J
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x 5'-11 5/16"	ST 403
	A4	5	3"x2"x1/4"x 13'-3"	ST 403
	A31	2	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3" x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	4	1/2" x 8 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9" x .0135" x 15'-2"	ST 303
	C	2	9" x .0135" x 13'-2 1/2"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2" x 1'-1/2" x .25" x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .19" x 1'-0"	ST 400
	P8	4	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

REF DRWG.	
7-A83-26	10-4-66
7-A81-13	10-4-68
7-A82-8	7-22-68
7-A84-28	7-22-68
SB-124	3-24-69
7-A83-24	8-15-68

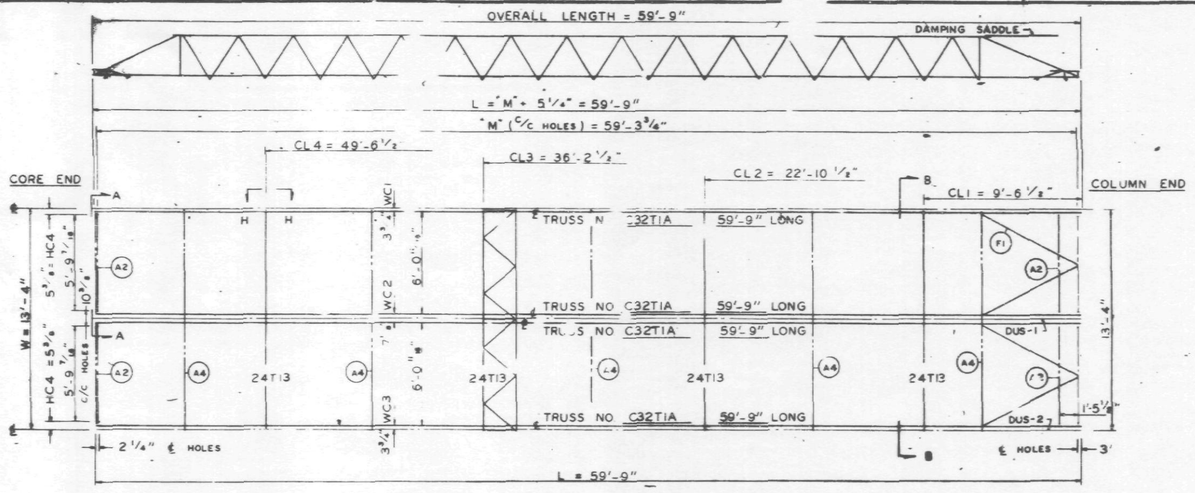
VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 59 & 92 (EAST)

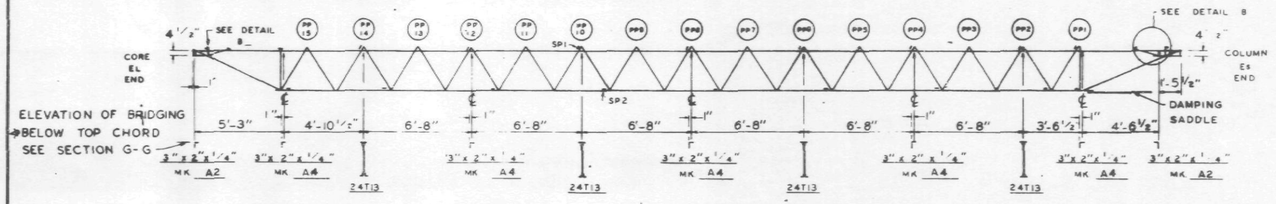
PANEL B7C-13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-26	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE MAY 8, 1969	IN CHARGE OF PROJ. DEV.
DETAILS [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FP B7C

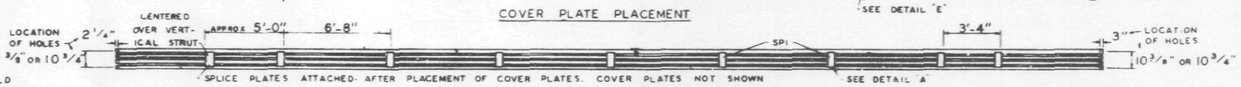


PANEL NO. B1A , SIZE 13'-4" x 59'-9"

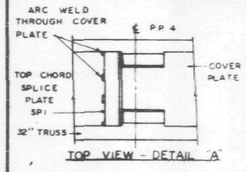
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



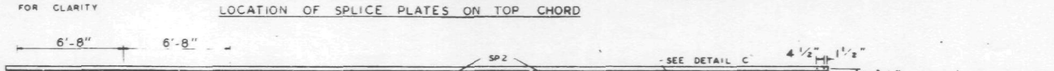
COVER PLATE PLACEMENT



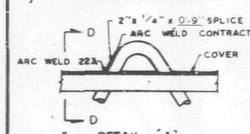
LOCATION OF SPLICE PLATES ON TOP CHORD



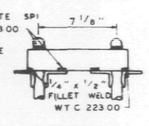
TOP VIEW - DETAIL 'A'



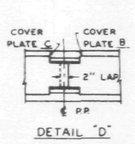
LOCATION OF SPLICE PLATES ON BOTTOM CHORD



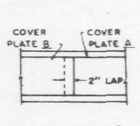
DETAIL 'A'



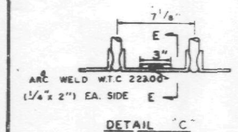
SECTION D-D



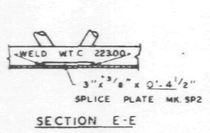
DETAIL 'D'



DETAIL 'E'

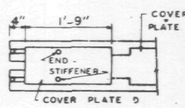


DETAIL 'C'

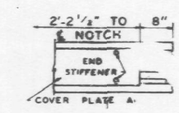


SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ' 4" x 1" FILLET WELDS



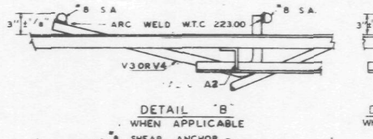
DETAIL 'F'



DETAIL 'G'

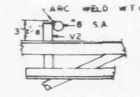
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 223.00

COVER PLATES 29 GA. THICK

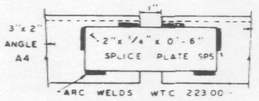


DETAIL 'B'

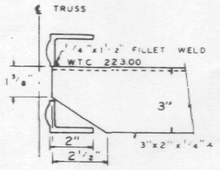
TOP VIEW - DETAIL 'B'



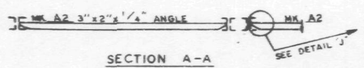
DETAIL B1 WHEN APPLICABLE



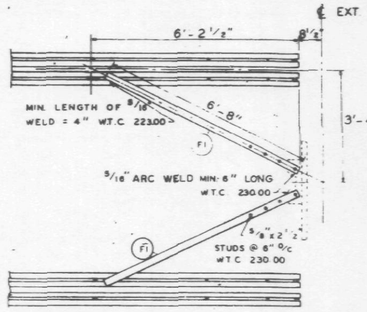
TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL 'J'
END SUPPORT ANGLE ATTACHMENT



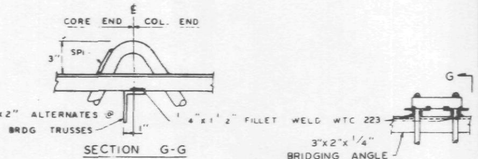
SECTION A-A
END SUPPORT ANGLES



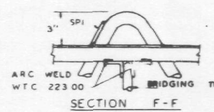
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

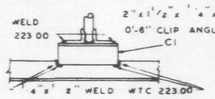
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS.		
FLOOR TRUSSES	T1A	4	C32TIA - 59'-9"	ST201A
BRIDGING TRUSSES	T13	4	T13 - 13'-8"	T211
3"x2"x1/4" ANGLE	A2	4	3"x2"x ..5-11 5/16"	ST400
	A4	5	3"x2"x /4 x 13'-5"	ST400
DIAGONAL FLATS	F1		1 1/2"x 5/8"x 8'-8"	ST400
SPLICE PLATE	SP1		2"x 1/4" x 0'-9"	CD201
	SP2	18	3"x 3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4"x 0'-6"	CD201
COVER PLATES	A	2	9"x.0135"x 13'-11 1/2"	ST303
	B	4	9"x.0135"x 15'-2"	ST303
	C	2	9"x .0135" x 13'-2 1/2"	ST303
	D	2	9" x .0135" x 1'-8"	ST303
ANGLE CLIPS	C1	16	3"x2"x 1/4"x 0'-6"	CD201
#8 SHEAR ANCHOR	SA	8	#8 REBAR x 0'-9"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2"x 3 1/2"x 3/8"x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x 3 1/2"x 3/8"x 3'-7 3/8"	ST2.8
CONNECTION BAR	CB	16	3/4" # x 0'-9"	CD201



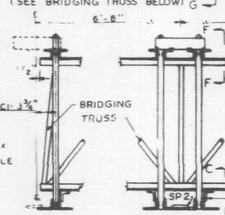
SECTION G-G



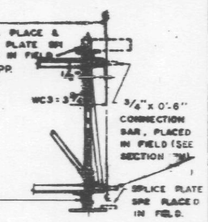
SECTION F-F

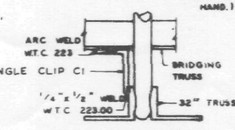


SECTION C-C

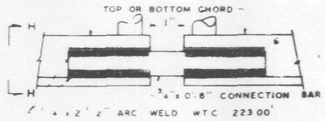


SECTION B-B

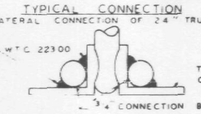




DETAIL "H"



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES



SECTION H H

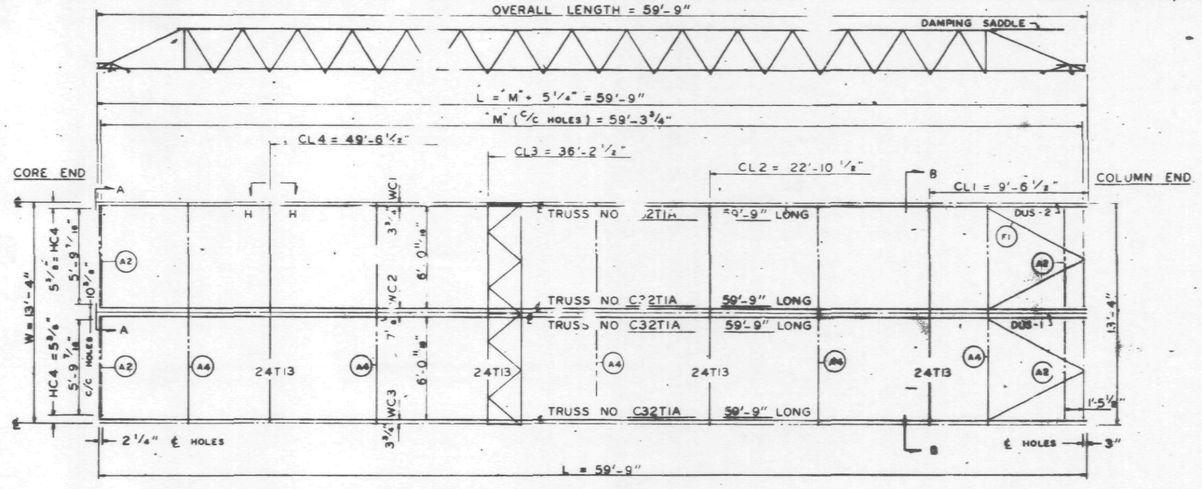
REF DRWG	
7-AB4-3 & 3.1	1-3-68
7-AB4-15 & 16	1-3-68
7-AB4-39-42	1-3-68
SA-124	10-20-67
7-AB3-2	1-3-68
7-AB1-2	2-15-68
7-AB2-8 & 8.1	2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH); 49-58, 60-66, 68
69 (NORTH) PANEL B1A - 13'-4" x 59'-9"

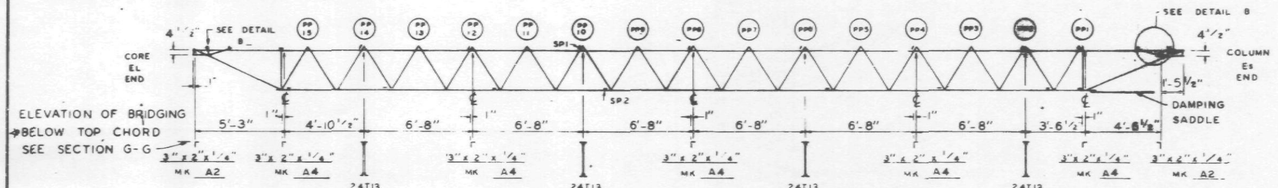
FABRICATION BY LACLEDE STEEL COMPANY

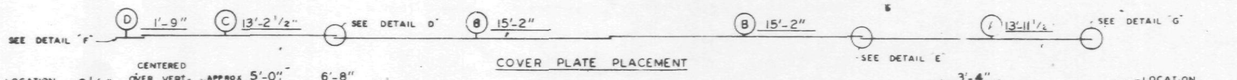
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING 7-AB3-5 2-15-68	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY A.B. PAUL DATE FEB 24, 1968	IN CHARGE OF
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP B1A



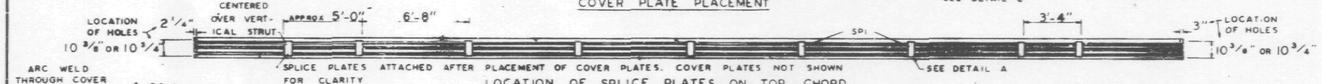
PANEL NO. B1A SIZE 13'-4" x 59'-9"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

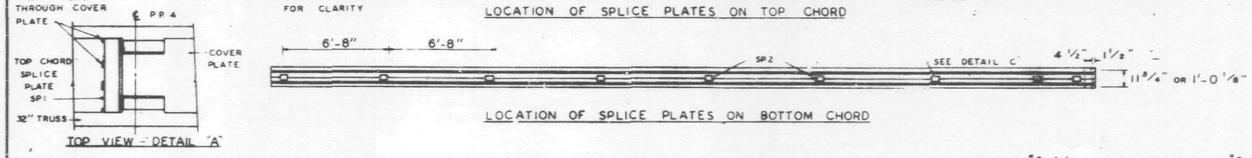




COVER PLATE PLACEMENT

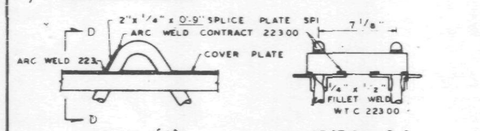


LOCATION OF SPLICE PLATES ON TOP CHORD



LOCATION OF SPLICE PLATES ON BOTTOM CHORD

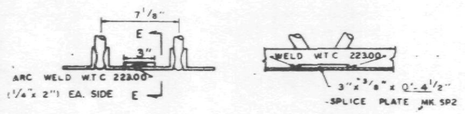
TOP VIEW - DETAIL 'A'



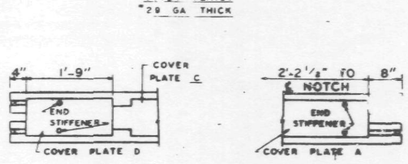
DETAIL 'A' SECTION D-D

DETAIL 'D' DETAIL 'E'

COVER PLATES 20 GA THICK

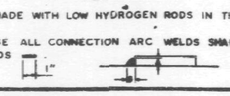


DETAIL 'C' SECTION E-E

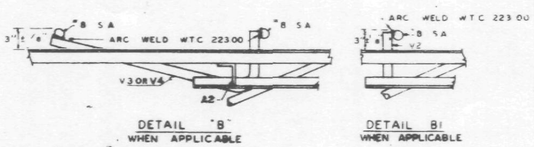


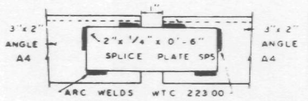
DETAIL 'F' DETAIL 'G'

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS

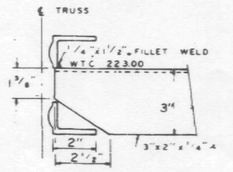


FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

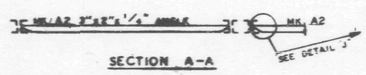




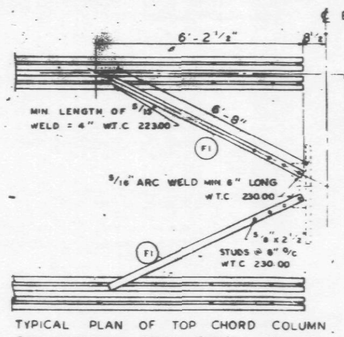
TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL 'J'
END SUPPORT ANGLE ATTACHMENT



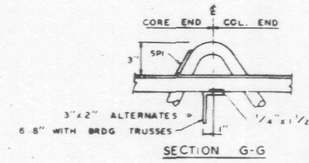
SECTION A-A
END SUPPORT ANGLES



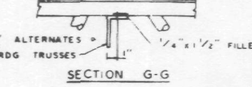
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00

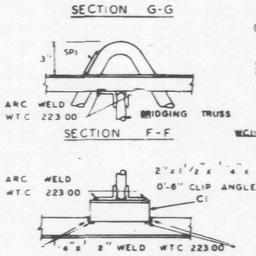
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T1A	4	C32T1A - 59'-9"	ST201A
BRIDGING TRUSSES	T13	4	4 - 13'-8"	ST 11
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4" x 11 5/16"	400
	A4	5	3"x2"x1/4" x 13'-3"	ST400
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 8'-8"	ST400
SPLICE PLATES	SP		2"x 1/4" x 0'-9"	CD201
	SP2	18	3"x 3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4"x 0'-6"	CD201
COVER PLATES	A	2	9"x.0135"x 13'-11 1/2"	ST303
	B	4	9"x.0135"x 15'-2"	ST303
	C	2	9"x .0135" x 13'-2 1/2"	ST303
	D	2	9"x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	16	3"x2"x 1/4" x 0'-6"	CD201
#8 SHEAR ANCHOR	SA	8	#8 REBAR x 0'-9"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x 3/8"x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x 3'-7 3/8"	ST298
CONNECTION BAR	CB	16	3/4" # x 0'-9"	CD201



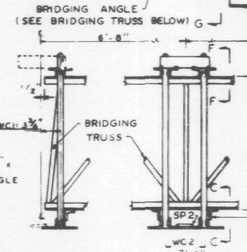
SECTION G-G



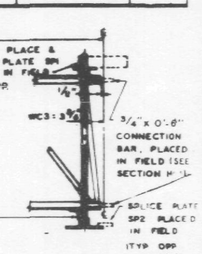


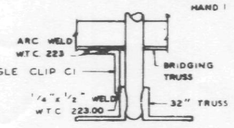
SECTION F-F

SECTION C-C

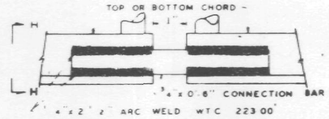


SECTION B-B

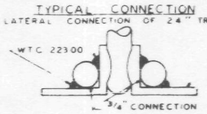




DETAIL 'H'



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES



SECTION H H

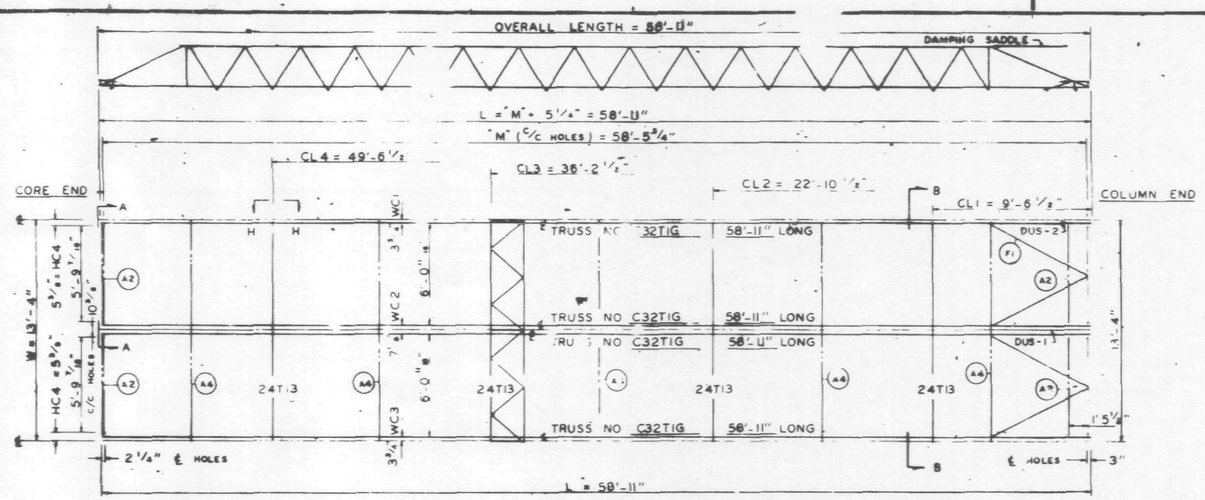
REF DRWG		
7-AB4-3 & 3.1	1-3-68	
7-AB4-15 & 16	1-3-68	
7-AB4-39-42	1-3-68	
SA-124	10-20-67	
7-AB3-2	1-3-68	
7-AB1-2	2-15-68	
7-AB2-BAB.1	2-15-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH); 49-58, 60-66, 68
89 (NORTH) PANEL B1A - 13'-4" x 59'-9"

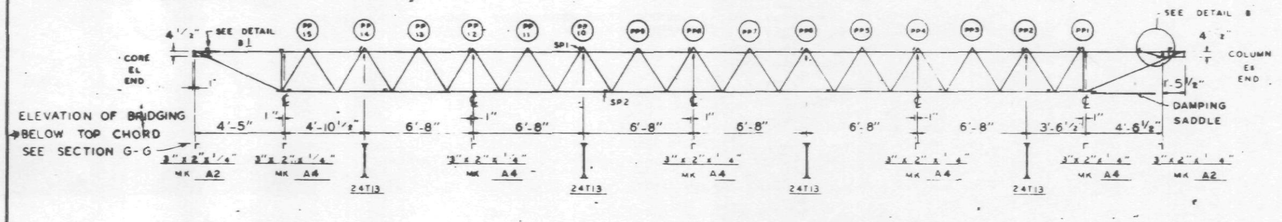
FABRICATION BY LACLEDE STEEL COMPANY

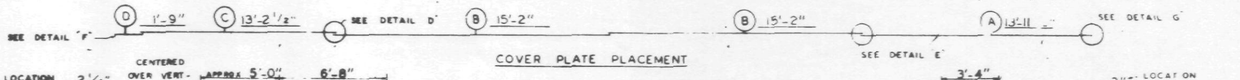
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-6 2-15-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY	
		DATE FEB 24, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL DATE FEB 24, 1968	IN CHARGE OF PROJ. DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP B1A



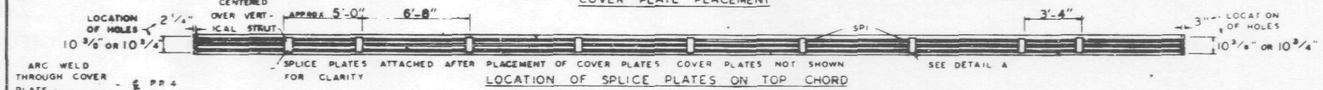
PANEL NO. BRIG SIZE 13'-4" x 58'-11"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

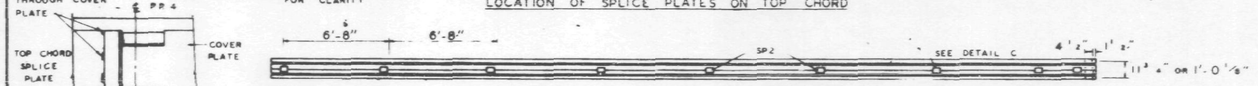




COVER PLATE PLACEMENT

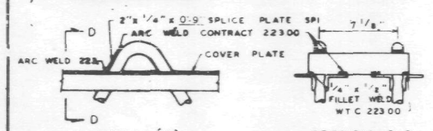


LOCATION OF SPLICE PLATES ON TOP CHORD



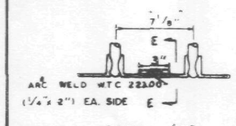
TOP VIEW - DETAIL 'A'

LOCATION OF SPLICE PLATES ON BOTTOM CHORD

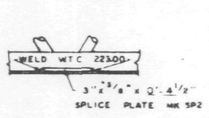


DETAIL 'A' SECTION D-D

DETAIL 'D' DETAIL 'E'

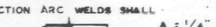


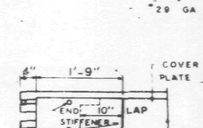
DETAIL 'C'



SECTION E-E

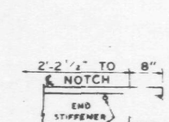
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS





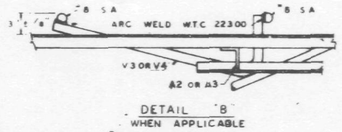
DETAIL 'F'

COVER PLATES 20 GA THICK

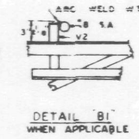


DETA 'G'

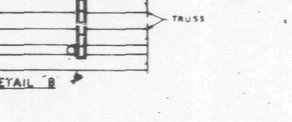
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00



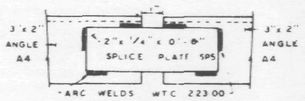
DETAIL 'B'



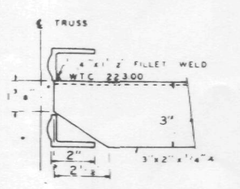
DETAIL 'B1' WHEN APPLICABLE



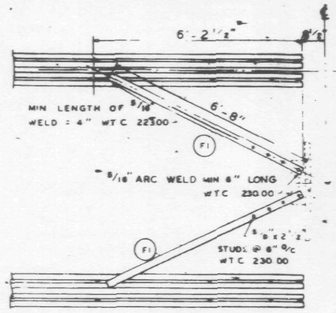
SECTION A-A
END SUPPORT ANGLES



TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



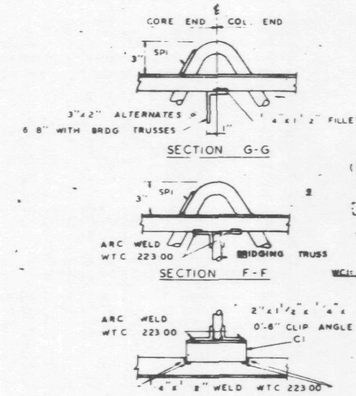
DETAIL 'J'
END SUPPORT ANGLE ATTACHMENT

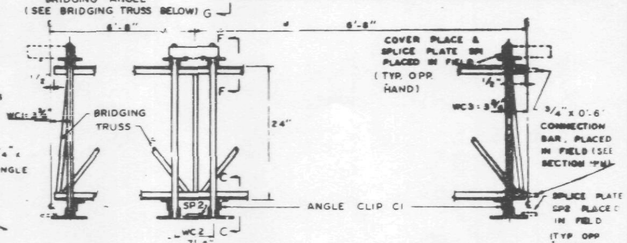


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

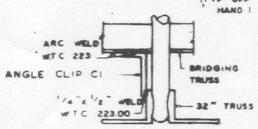
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL				
MATERIAL	MK			DWG
FLOOR TRUSSES	T13	4	C32TIG - 58'-11"	ST201G
BRIDGING TRUSSES	T13	4	T13 - 18'-8"	T211
3"x 2"x 1/4" ANGLE	A2	4	3"x 2"x 1/4" - 3'-11 5/16"	ST400
	A4	5	3"x 2" x 1/4 x 13'-11"	ST400
DIAGONAL FLATS	FI		1 1/2" x 5/16" x 6'-8"	ST400
SPLICE PLATES	SP1		2"x 1/4" x 0'-9"	CD201
	SP2	18	3" x 3/8" x 0'-4 1/2"	CD201
	SP5	5	2" x 1/4" x 0'-8"	CD201
COVER PLATES	A	2	9" x .0135" x 13'-11 1/2"	ST303
	B	4	9" x .0135" x 15'-2"	ST303
	C	2	9" x .0135" x 13'-2 1/2"	ST303
	D	2	9" x .0135" x 1'-9"	ST303
ANGLE CLIPS	CI	16	3"x2"x 1/4" x 0'-6"	CD201
8" SHEAR ANCHOR	SA	6	8" REBAR x 0'-8"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 5/8" x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 5/8" x 3'-7 3/8"	ST298
CONNECTION BAR	CB	16	3/4" # x 0'-9"	CD201

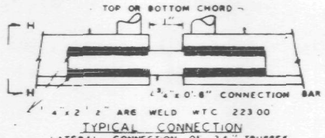




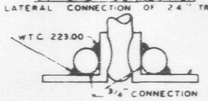
SECTION B-B



DETAIL "H"



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES



SECTION H-H

REF DRWG		
7-AB4-3 & 3.1	1-3-68	
7-AB4-15 & 16	1-3-68	
7-AB4-39-42	1-3-68	
SA-124	10-20-67	
7-AB3-2	1-3-68	
7-AB1-2	2-15-68	
7-AB2-8 & 8.1	2-15-68	

101D

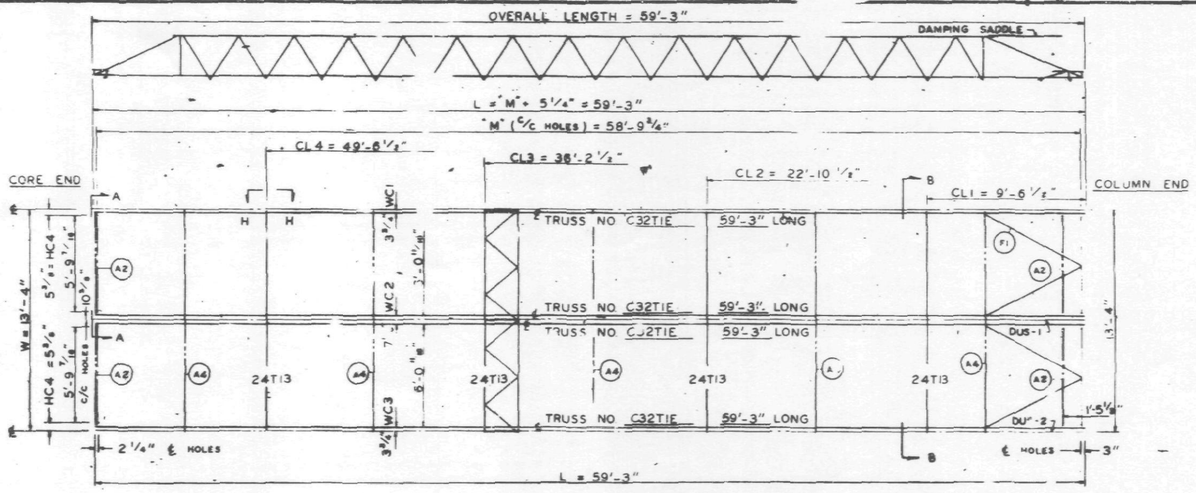
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10,11 & 39 (NORTH) 39 & 40 (SOUTH)

PANEL BRIG - 13'-4" x 58'-11"

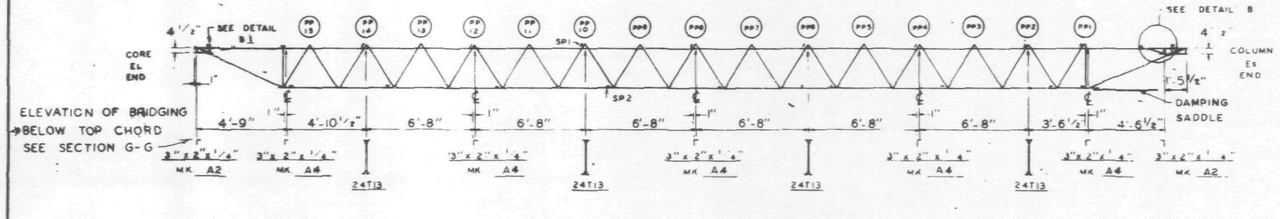
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-5 2-15-68 PLATE	
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE FEB 24, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL IN CHARGE OF PROD DEV DATE FEB 24, 1968	
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONTR. NO. W.T.C. 221	SHEET NO. FP BRIG

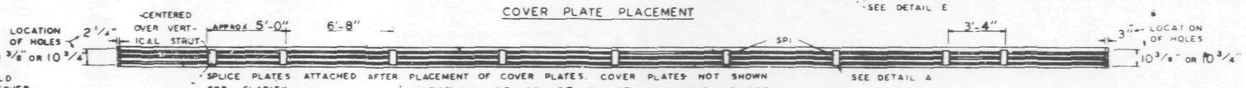


PANEL NO. BIE SIZE 13'-4" x 59'-3"

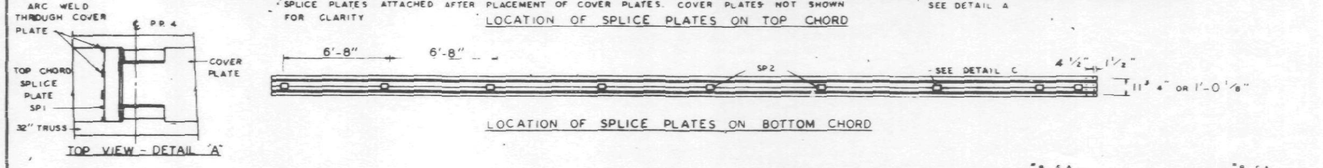
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



COVER PLATE PLACEMENT

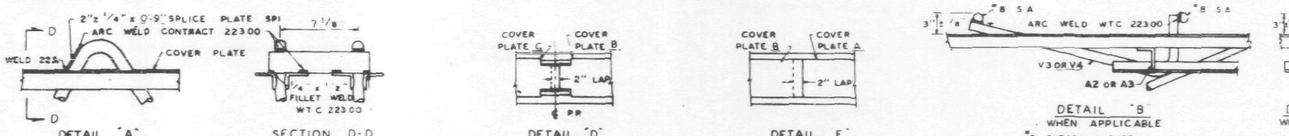


LOCATION OF SPLICE PLATES ON TOP CHORD



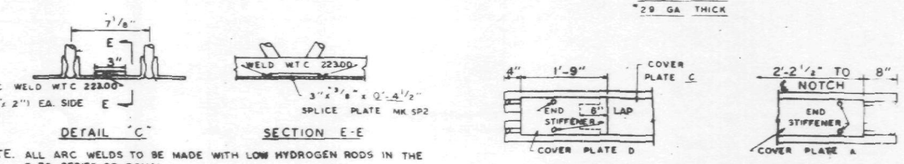
TOP VIEW - DETAIL "A"

LOCATION OF SPLICE PLATES ON BOTTOM CHORD



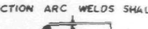
DETAIL "A" | SECTION D-D | DETAIL "D" | DETAIL "E" | DETAIL "B" WHEN APPLICABLE | DETAIL B1 WHEN APPLICABLE | TYPICAL CONNECTION LATERAL CONNECTION OF 3"x2" ANGLES

COVER PLATES "29 GA THICK



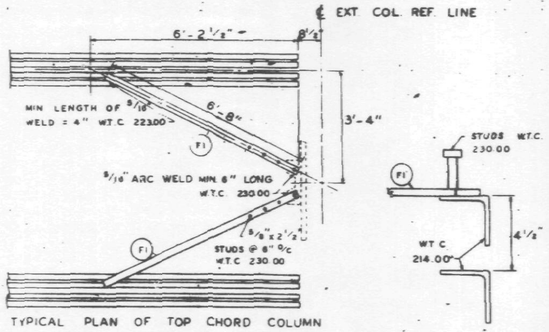
DETAIL "C" | SECTION E-E | DETAIL "F" | DETAIL "G" | TOP VIEW - DETAIL "B" | SECTION A-A END SUPPORT ANGLES

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ' 4" x 1" FILLET WELDS



A = 1/4"
B = 1/4"

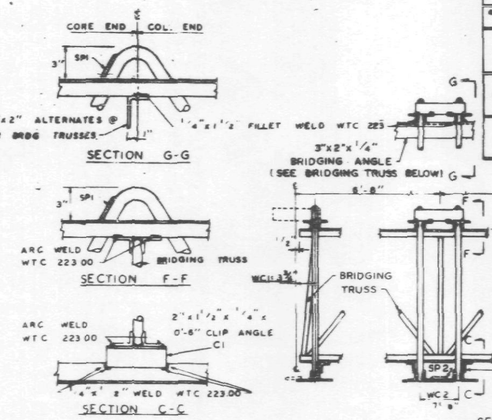
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00

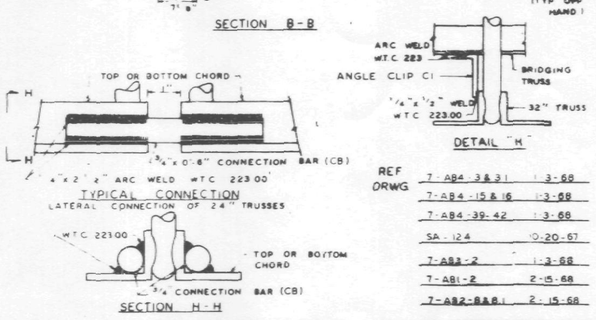


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

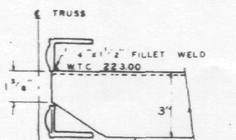
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL		PCS	SIZE	REF DRWG
FLOOR TRUSSES	TIE	4	C32TIE - 59'-3"	ST201E
BRIDGING TRUSSES	T13	4	3 - 13'-8"	ST211
3"x2"x1/4" ANGL	A2	4	3"x2"x1/4"x 0'-11 15/16"	ST400
	A4	5	3"x2"x 13'-3	ST400
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 8'-8	ST400
SPLICE PLATES	SP1	2	2"x1/4"x 0'-9"	CD201
	SP2	18	3"x 3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4"x 0'-6"	CD201
COVER PLATES	A	2	9"x.0135"x 13'-11 1/2"	ST303
	B	4	9"x.0135" x 15'-2"	ST303
	C	2	9"x .0135" x 13'-2 1/2"	ST303
	D	2	9" x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	18	3"x2"x 1/4"x 0'-8"	CD201
⌀8 SHEAR ANCHOR	SA	6	⌀8 REBAR x 0'-9"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x 3/8"x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x 5'-7 3/8"	ST298
CONNECTION BAR	CB	16	3/4" ⌀ x 0'-9"	CD201





REF DRWG		
7-AB4 3 & 31	1-3-68
7-AB4-15 & 16	1-3-68
7-AB4-39-42	1-3-68
SA-124	10-20-67
7-AB3-2	1-3-68
7-AB1-2	2-15-68
7-AB2-BAB1	2-15-68



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

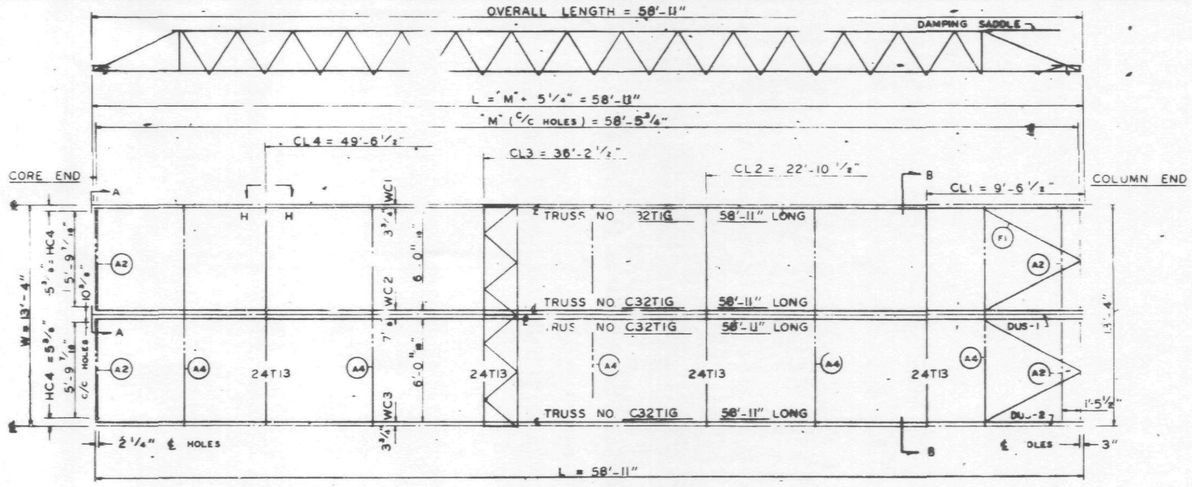
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)

PANEL BIE - 13'-4" x 59'-3"

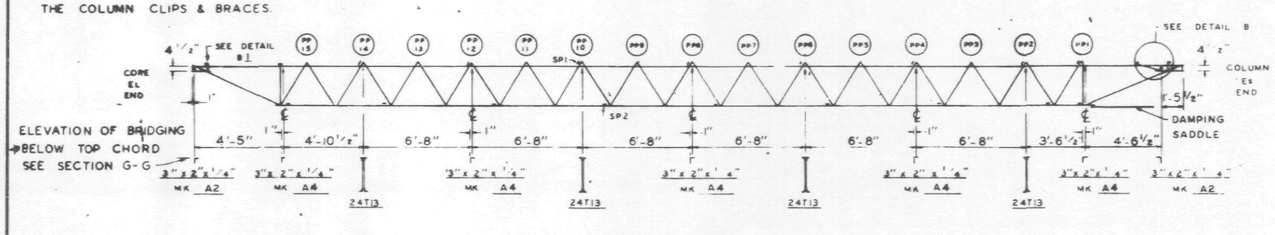
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING 7-AB2-5 2-15-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY DATE FEB 24, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY A.B. DATE FEB 24, 1968	IN CHARGE OF DESIGN DEPT.
DETAILED BY A.C. DATE		FABRICATION CONT. NO W.T.C. 221	ISSUED NO ISSUE

LACLEDE STEEL CO.

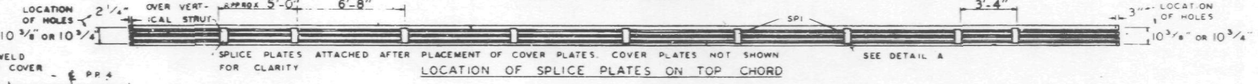


PANEL NO. BIG SIZE 13'-4" x 58'-11"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

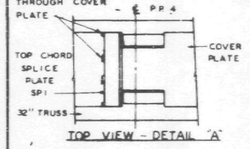


COVER PLATE PLACEMENT

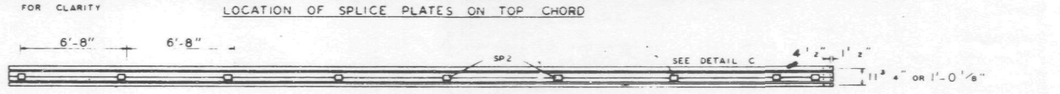


SPLICE PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

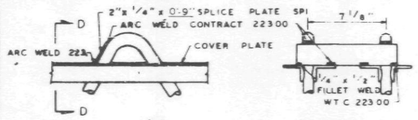
LOCATION OF SPLICE PLATES ON TOP CHORD



TOP VIEW - DETAIL "A"

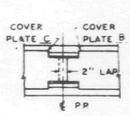


LOCATION OF SPLICE PLATES ON BOTTOM CHORD

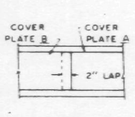


DETAIL "A"

SECTION D-D

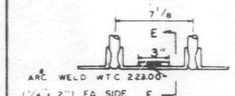


DETAIL "D"

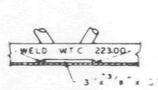


DETAIL "E"

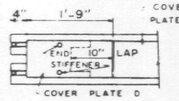
COVER PLATES 20 GA THICK



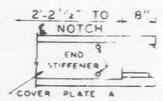
DETAIL "C"



SECTION E-E



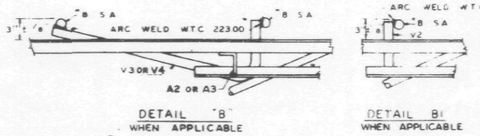
DETAIL "F"



DETA G

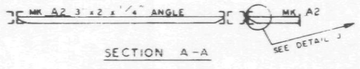
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1 4" x 1" FILLET WELDS

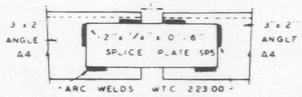


TOP VIEW - DETAIL B

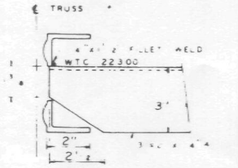
DETAIL B1
WHEN APPLICABLE



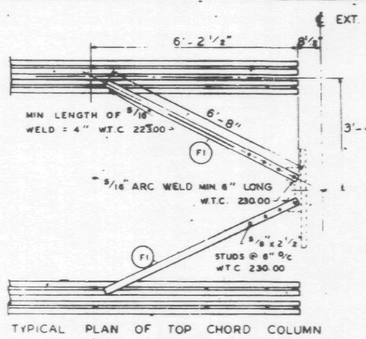
SECTION A-A
END SUPPORT ANGLES.



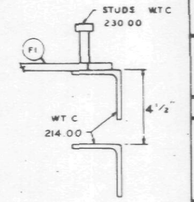
TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL J
END SUPPORT ANGLE ATTACHMENT

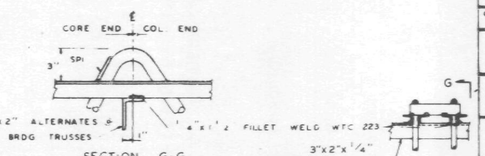


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

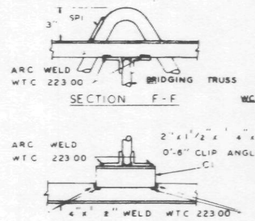


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS.	SIZE	SEE DWG.
FLOOR TRUSSES	TIG	4	C32TIG - 58'-11"	ST201G
BRIDGING TRUSSES	TI3	4	2" - 13'-8 1/8"	ST211
3"x 2"x 1/4" ANGL		4	3"x2"x1/4"x5'-11 1/8"	ST400
	A4	5	3"x2"x [illegible] x 13'-3"	ST400
DIAGONAL FLATS	F1	4	1 1/2"x 5/8" x 6'-8"	ST400
SPLICE PLATES	SP1		2"x1/4" x 0'-9"	CD201
	SP2	18	3"x 3/8" x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4" x 0'-8"	CD201
COVER PLATES	A	2	9"x.0135"x 13'-11 1/2"	ST303
	B	4	9"x .0135" x 15'-2"	ST303
	C	2	9"x .0135" x 13'-2 1/2"	ST303
	D	2	9" x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	18	3"x2"x1/4" x 0'-8"	CD201
#8 SHEAR ANCHOR	SA	6	#8 REBAR = 0'-9"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x 3/8"x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x 3'-7 3/8"	ST298
CONNECTION BAR	CB	16	3/4" # x 0'-9"	CD201

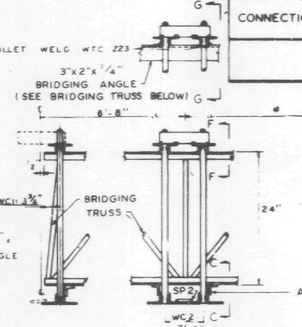


SECTION G-G

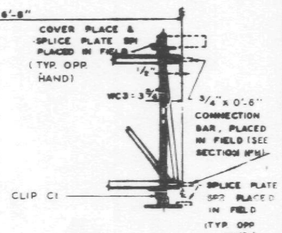


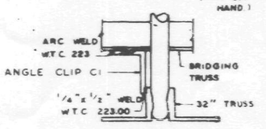
SECTION F-F

SECTION C-C

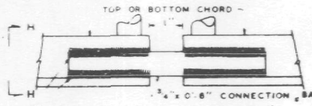


SECTION B-B

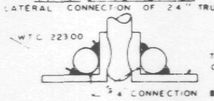




DETAIL "H"



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES



SECTION H-H

REF DRWG.		
	7-AB4-3 & 31	1-3-68
	7-AB4-15 & 16	1-3-68
	7-AB4-39-42	1-3-68
	SA-124	10-20-67
	7-AB3-2	1-3-68
	7-AB1-2	2-15-68
	7-AB2-8 & 8.1	2-15-68

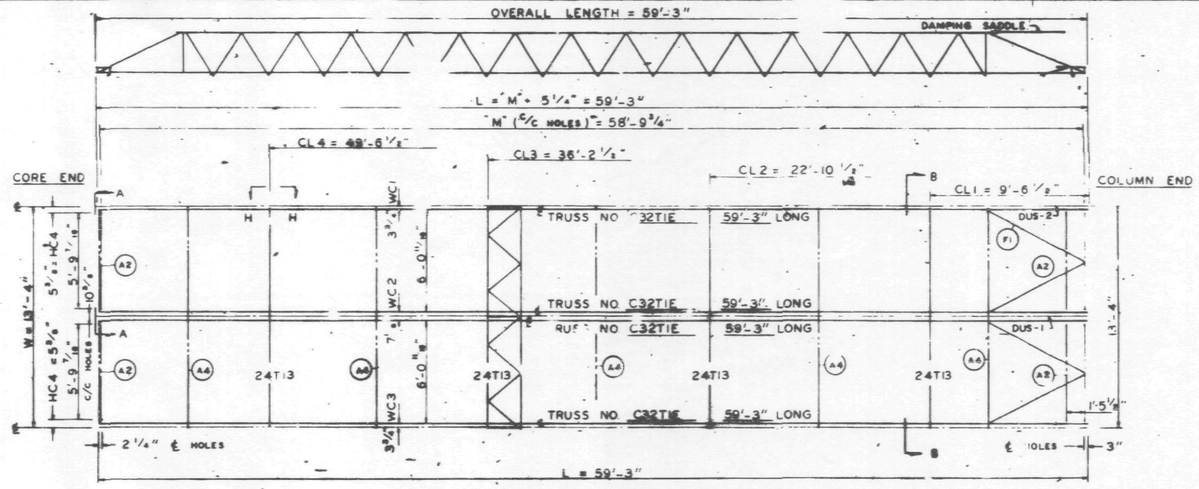
VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39 & 40 (NORTH & SOUTH)

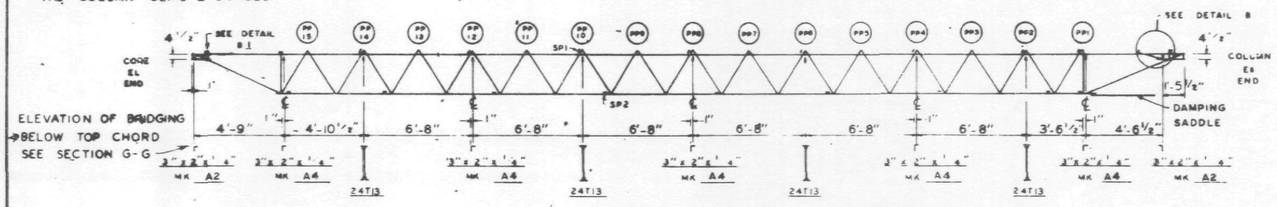
PANEL BIG - 13'-4" x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB2-5 2-15-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY DATE FEB 24, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE FEB 24, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WERNER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP BIG



PANEL NO. BRIE SIZE 13'-4" x 59'-3"

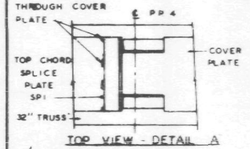
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



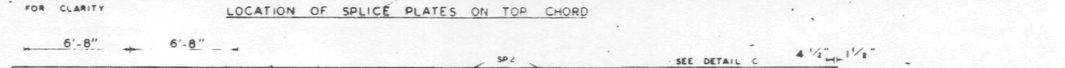
COVER PLATE PLACEMENT

SPLICE PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

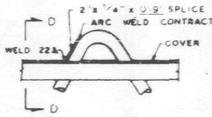
LOCATION OF SPLICE PLATES ON TOP CHORD



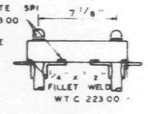
TOP VIEW - DETAIL A



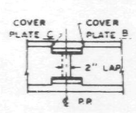
LOCATION OF SPLICE PLATES ON BOTTOM CHORD



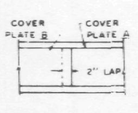
DETAIL "A"



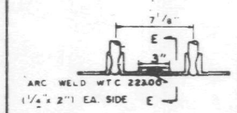
SECTION D-D



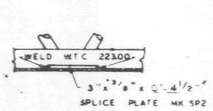
DETAIL "D"



DETAIL "E"

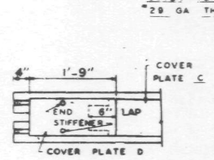


DETAIL "C"

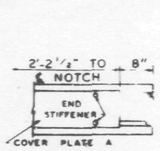


SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE ¼" x 1" FILLET WELDS



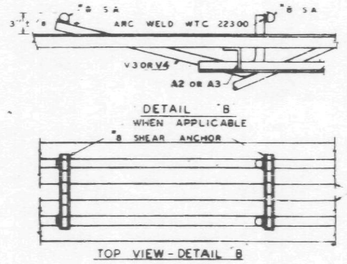
DETAIL "F"



DETAIL "G"

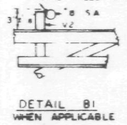
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223 00

COVER PLATES 20 GA THICK

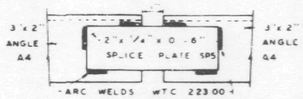


DETAIL "B" WHEN APPLICABLE

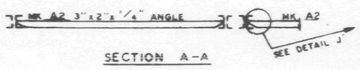
TOP VIEW - DETAIL "B"



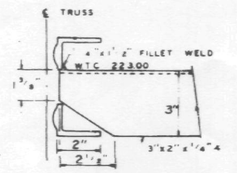
DETAIL B1 WHEN APPLICABLE



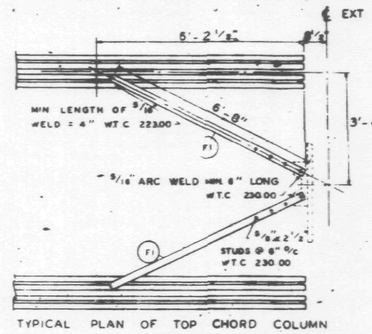
TYPICAL CONNECTION
LATERAL CONNECTION OF 3"x2" ANGLES



SECTION A-A
END SUPPORT ANGLES



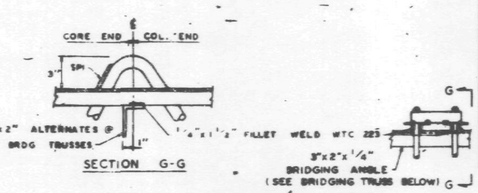
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



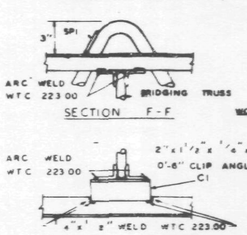
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

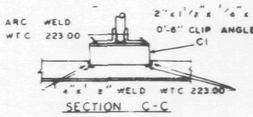
REQUIRED MATERIAL FOR [illegible]				SEE DRWG
MATERIAL	MK	PCS		
FLOOR TRUSSES	TIE	4	C32TIE - 59'-3"	ST201E
BRIDGING TRUSSES	T13	4	T13 - 13'-2"	ST211
		4	3"x2"x 1/4" - 11'-10"	ST400
3"x 2"x 1/4" ANG.	A4	5	3"x 2" x 13'-2"	ST400
DIAGONAL FLATS	F1		1 1/2"x 3/8"x 6'-"	ST400
SPLICE PLATES	SP1		2"x 1/4" x 0'-9"	CD201
	SP2	18	3"x 3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4"x 0'-6"	CD201
COVER PLATES	A	2	9"x .0135"x 13'-11 1/2"	ST303
	B	4	9"x .0135" x 15'-2"	ST303
	C	2	8"x .0135" x 13'-2 1/2"	ST303
	D	2	8"x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	18	3"x2"x 1/4" x 0'-6"	CD201
"B SHEAR ANCHOR	SA	6	"B SHEAR x 0'-9"	CD201
DAMPING SADDLE	DUS-1	1	3 1/2"x 3 1/2"x 3/8"x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x 3 1/2"x 3/8"x 3'-7 3/8"	ST298
CONNECTION BAR	CB	16	3/4"# x 0'-9"	CD201



SECTION G-G

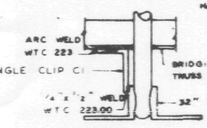


SECTION F-F

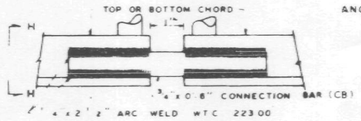


SECTION C-C

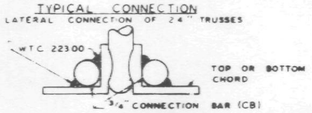
SECTION B-B



DETAIL "H"



TYPICAL CONNECTION
LATERAL CONNECTION OF 24" TRUSSES



SECTION H-H

REF DRWG		
7 AB4-3 & 31	1-3-68	
7-AB4-15 & 16	1-3-68	
7-AB4-39-42	1-3-68	
SA-124	10-20-67	
7-AB3-2	1-3-68	
7-AB1-2	2-15-68	
7-AB2, 8 & 8.1	2-15-68	

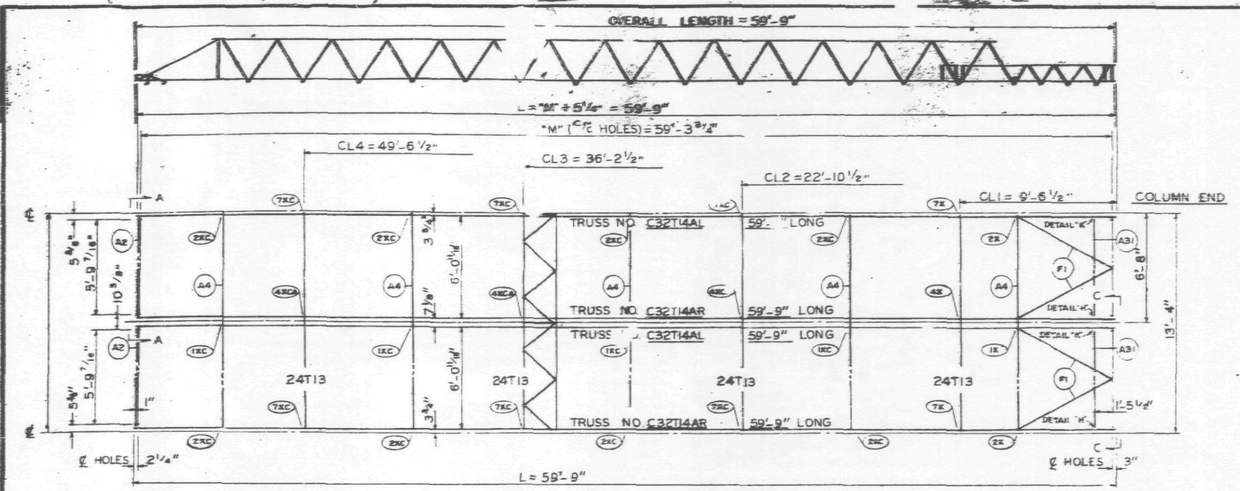
VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

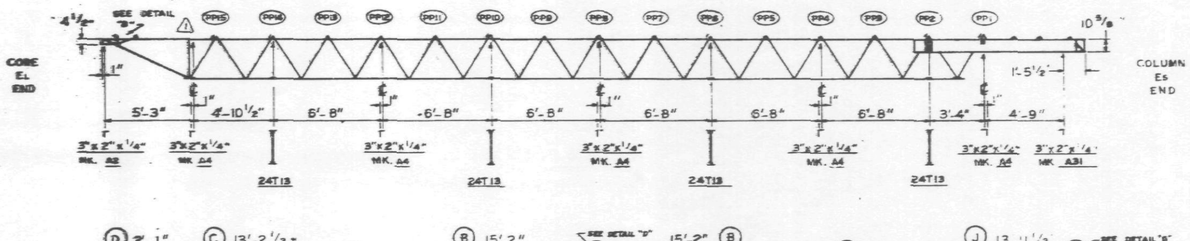
BLDG A FLOORS 10-11 (SOUTH)

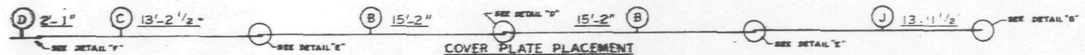
PANEL BRIE - 13'-4" x 59'-3"

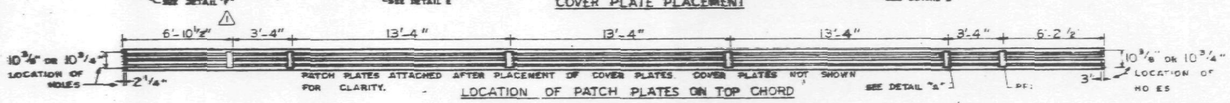
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-5	2-15-68 PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE FEB 26, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE FEB 26, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER	LACLEDE STEEL CO.	FABRICATION CONT. NO W.T.C. 221	SHEET NO FP-BRIE

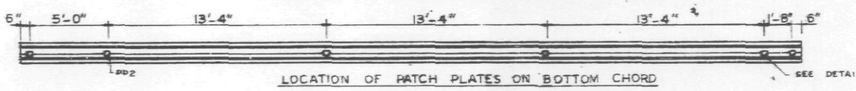


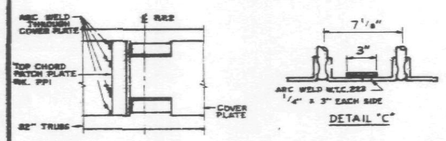
PANEL NO. B2A SIZE 13'-4" x 59'-9"

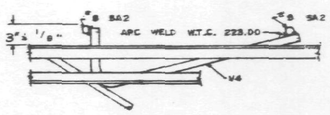


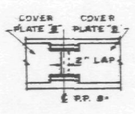


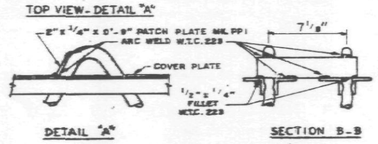


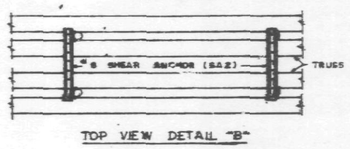


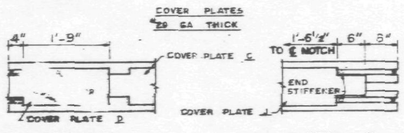


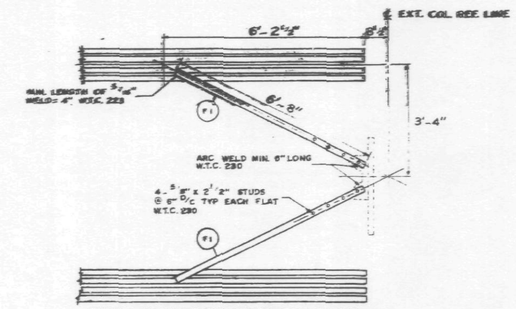




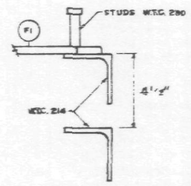




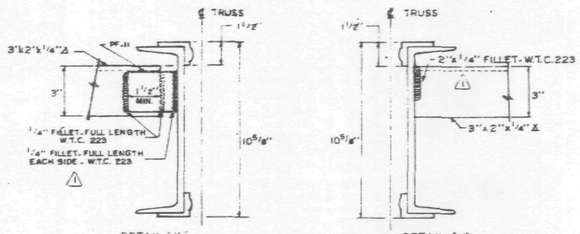




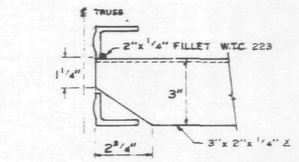
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



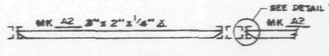
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



SECTION C-C
END SUPPORT ANGLE



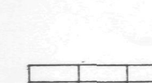
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	[illegible]	2	C32T14AL x 59'-9"	ST 214AL
	[illegible]	2	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T13	4	24T13 x -3"	ST 213
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x 5'-11 9/16"	ST 403
	A4	5	3"x2"x1/4": 3"	ST 403
	A31	2	3"x2"x1/4 -8 1/8"	ST 410
CLOSURE PLATES	PF-11	2	3"x 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 3/16" x 6'-8"	ST 402
PATCH PLATE	PP1	12	2" x 1/4" x 0'-[illegible]"	ST 400
	PP2	12	3" x 3/8" x 0'-9"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 203
	C	2	9"x .0135" x 13'-2 1/2"	ST 203
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/2"	ST 204
ANGLE CLIPS	C1	16	2" x 1 1/2" x .25" x 6"	ST 400
"B SHEAR ANCHOR	SA2	4	"B REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" B x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	4	4 1/2" x .38" x 1'-0"	ST 400
	P8	4	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie - (K).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	GDC

REF DRWG.

7-AB3-26	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SA-124	10-11-68
7-AB3-24	8-15-68

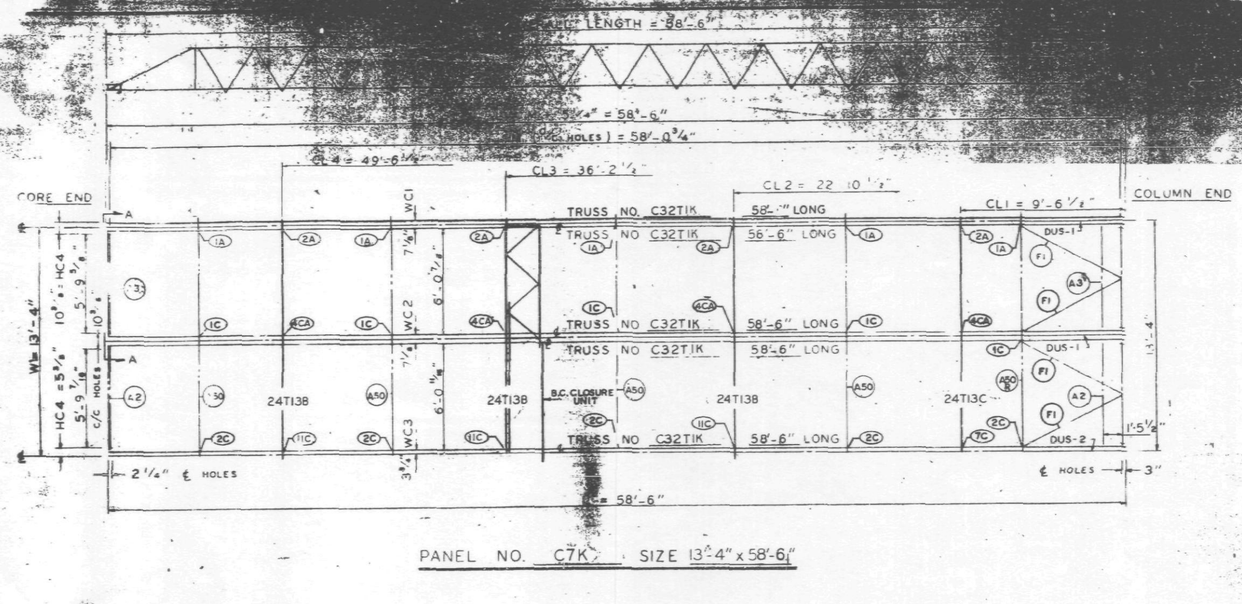
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL B2A - 13'-4" x 59'-9"

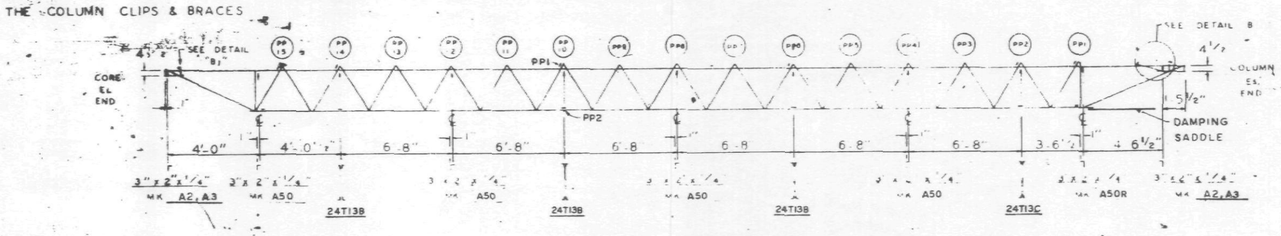
FABRICATION BY LACLEDE STEEL COMPANY

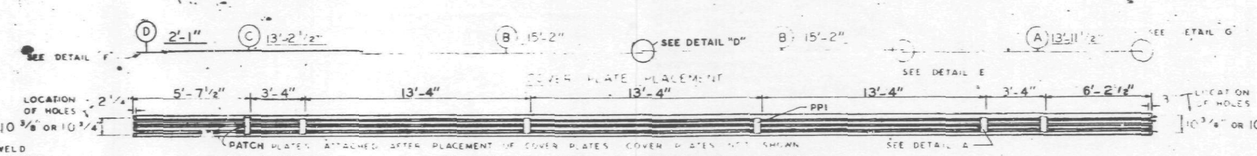
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-26	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 2/28/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.N. CHUBA DATE DEC. 5, 1968	IN CHARGE OF DRWG. [illegible]
DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP B2A



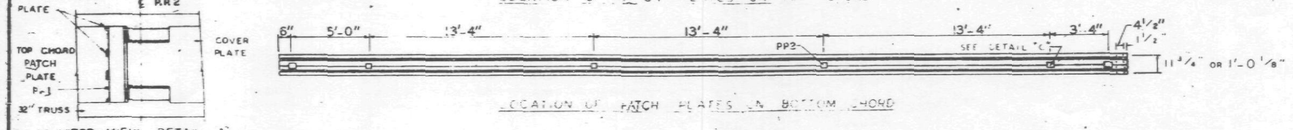
PANEL NO. C7K SIZE 13'-4" x 58'-6"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



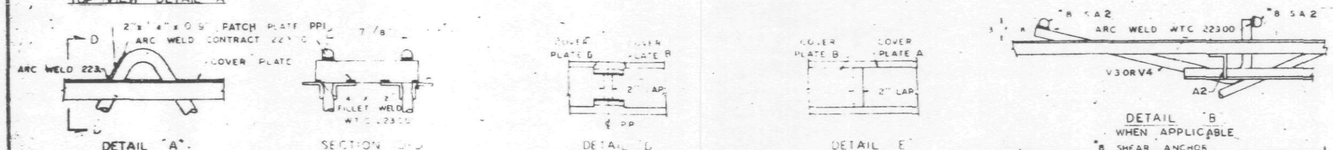


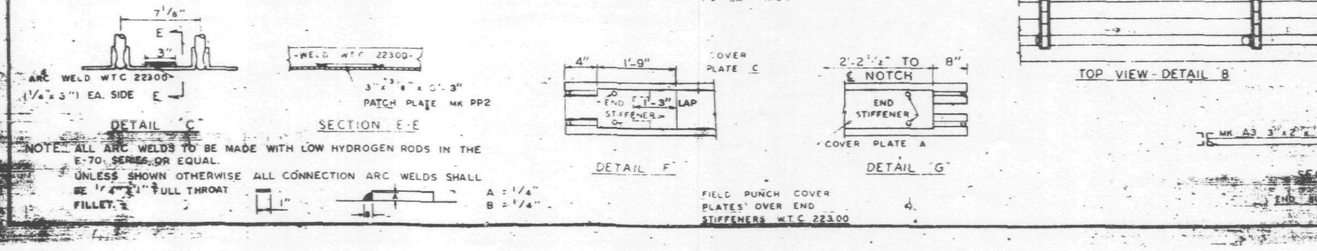
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

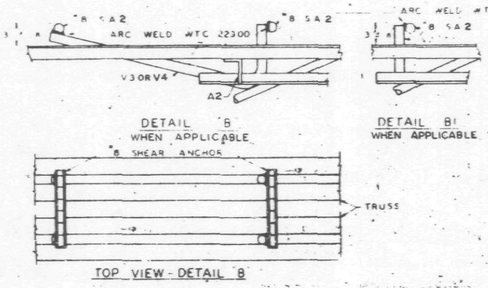
TOP VIEW DETAIL A

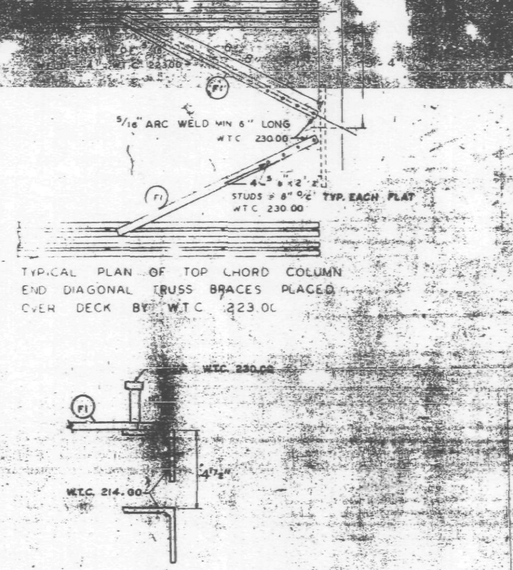




NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.
A = 1/4"
B = 5/16"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300





	MK	NO.	SIZE	WT.	
3"x2"x1/4" ANGLE	T13C	1			
	A2	2	3"x2"x1/4 x 5'-11 1/8"		ST 403
	A3	2	3"x2"x1/4 x 5'-11 1/8"		ST 403
	A50	28	3"x2"x1/4"x1'-1 1/2"		ST 413
	A50R	1	3"x2"x1/4"x1'-1 1/2"		ST 413
DIAGONAL FLATS	F1	4	1"x 3 5/8"x 8'-6"		ST 402
PATCH PLATES	PP1	18	2"x 1/4"x 0'-8"		ST 400
	PP2	6	3"x 5/16"x 0'-3"		ST 400
COVER PLATES	A	3	9"x .0135"x 13'-11 1/2"		ST 303
	B	6	9"x .0135"x 13'-2"		ST 303
	C	3	9"x .0135"x 13'-2 1/2"		ST 303
	D*	3	9"x .0135"x 2'-1"		ST 303
ANGLE CLIPS	C1	13	2"x 1/2"x 1/4"x 0'-8"		ST 400
8" SHEAR ANCHOR	SA8	9	8" SHEAR ANCHOR x 0'-8"		ST 400
DAMPING SADDLE	DS1	3	1/4"x 2 3/8"x 1'-10 1/8"		ST
	DS2	1	3/8"x 2 3/8"x 1'-6 7/8"		ST
CONNECTION BAR	CB1	8	1/4"x 1'-3"x 3"x 5		ST 400
CONNECTION PLATES	P1	5	3/8"x 3"x 0'-8"		ST 400
	P2	4	3/8"x 1'-.30"x 0'-8"		ST 400
	P3	1	1/4"x 1'-.30"x 1'-10"		ST 400
	P14	4	3"x1"x 0'-11"		ST 416
CLOSURE UNIT	BC	3	1 1/4" D 8'-8 1/2" TUBE		BT 2138

NUMBERS AND LETTERS IN ELLIPSES ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 229.

NO.	DATE	REVISION	BY

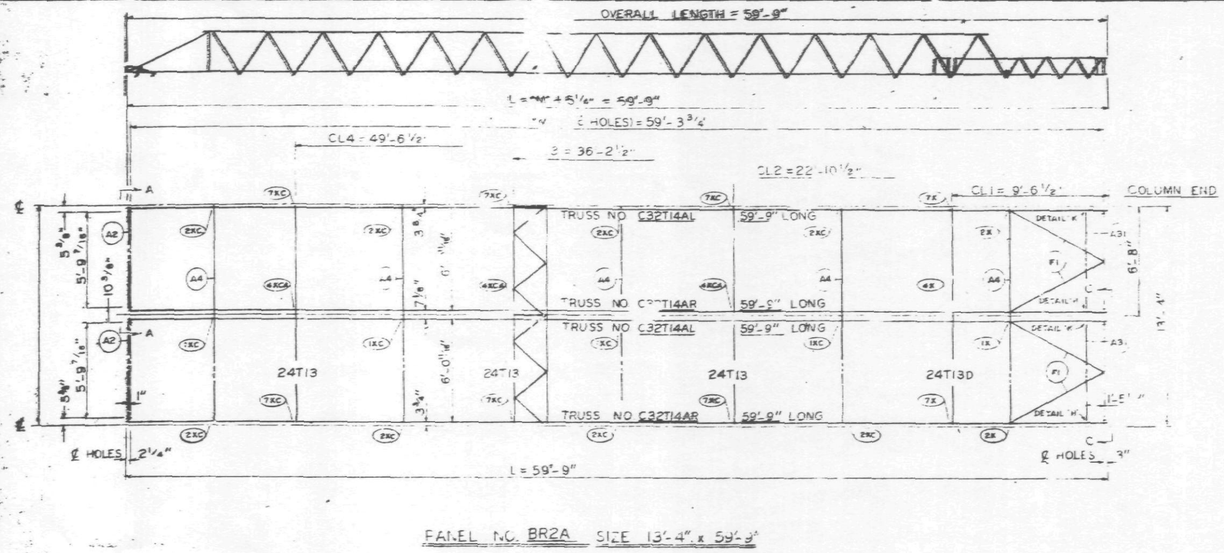
REF. DRWG		
7-AB4-15.1	10-4-68	
7-AB4-15 & 15	7-22-68	
7-AB4-42	10-15-68	
SA-124	1-6-69	
7-AB3-7a	10-15-68	
7-AB1-24	1-6-69	
7-AB2-8	7-22-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

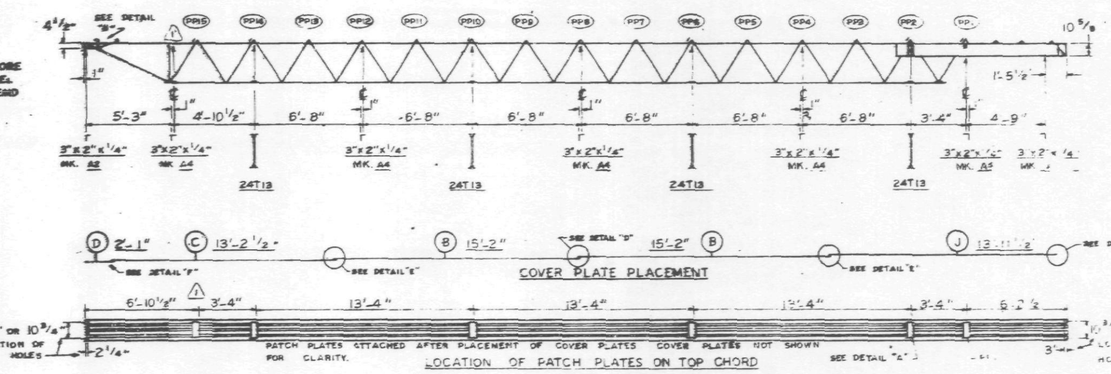
BLDG. 6 FLOORS 45 (WEST)

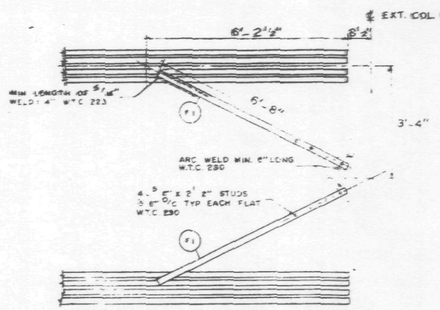
PANEL C7K - 13'-4" x 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT: MADISON, ILLINOIS
APPROVED FOR FABRICATION BY: James White FOR P.O.N.Y.N.J. DATE 7/9/69
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
LACLEDE STEEL CO. DETAILED BY
SHOP DRAWING NO. 3-13-79 SHEET
CHECKED BY T.M.CHIRA DATE JULY 1, 1969
CHECKED BY DATE JULY 1, 1969
FD-C7K

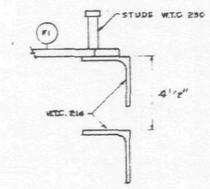


PANEL NO. BR2A SIZE 13'-4" x 59'-9"





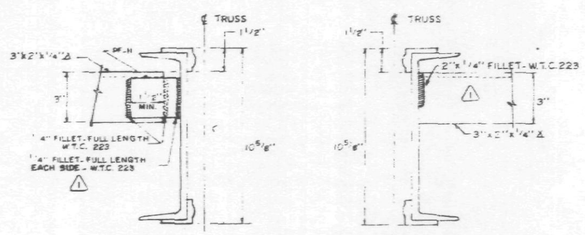
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

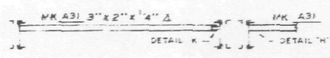
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AL	2	C32T14AL x 59'-9"	ST 214AL
	T14AR	2	C32T14AR x 59'-9"	ST 214
BRIDGING TRUSSES	T13	2	24T13 x 12'-7	ST 213
	T13D	1	24T13D 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
	A4	5	3"x2"x1/4"x 13'-[illegible]	ST 403
	A31	2	3"x2"x1/4"x [illegible]	ST 410
CLOSURE PLATES	PP11	2	3" x 4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	4	2' x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/8"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	16	2"x1 1/2"x.25"x 6"	ST 400
*8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2"x3/8"x0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-8"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400
	P8	4	3"x 1 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS. e.g. (K)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

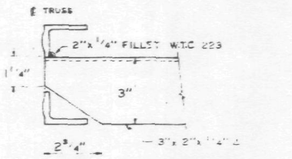


DETAIL 'K' END SUPPORT ANGLE ATTACHMENT

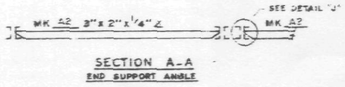
DETAIL 'H' END SUPPORT ANGLE ATTACHMENT



SECTION C-C END SUPPORT ANGLE



DETAIL 'J' END SUPPORT ANGLE ATTACHMENT

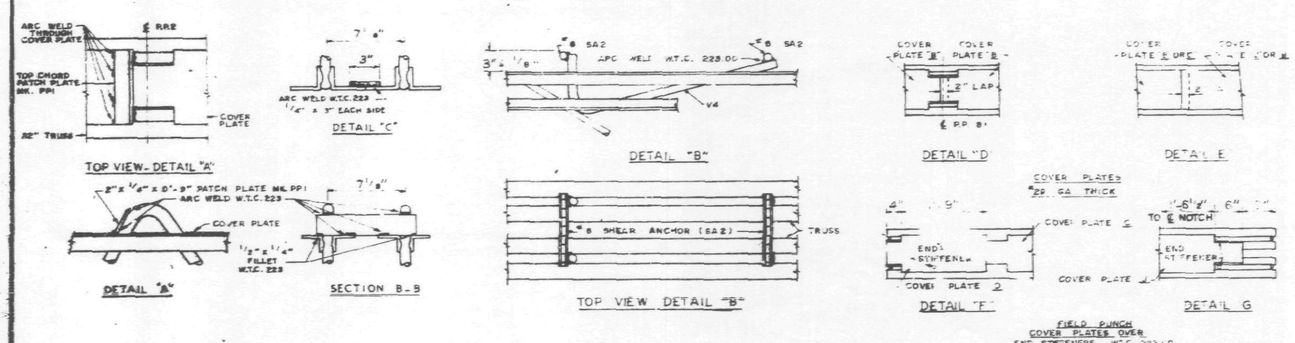


SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	GDC

REF. DRWG.

7-AB3-27	10-4-68
7-AB1-13 1	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SA-124 1	10-11-68
7-AB3-24	8-15-68

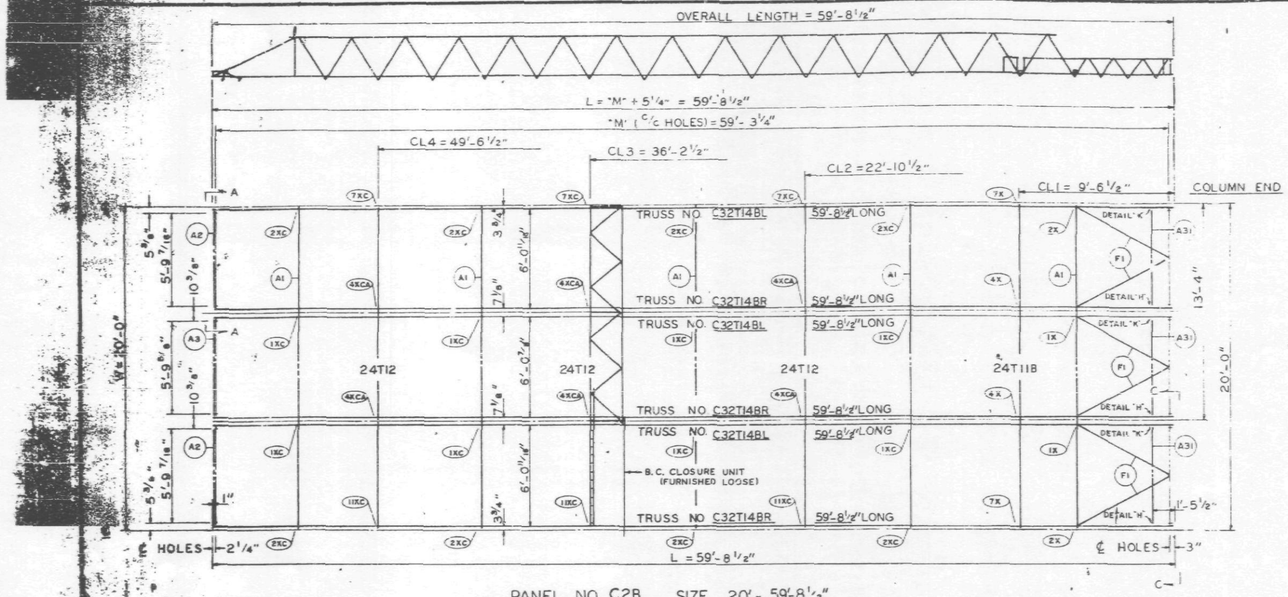


FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

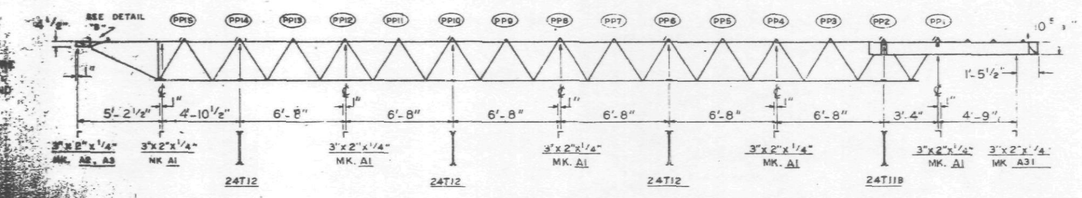
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

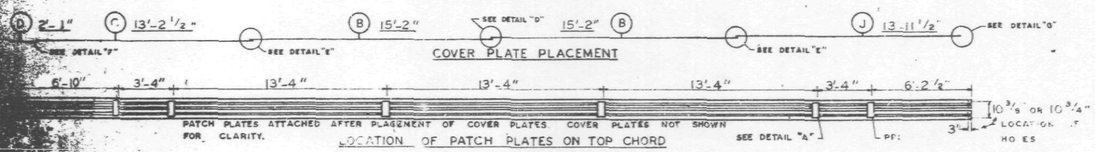
PANEL BR2A-13'-4" x 59'-9" ⚠

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-27	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 12/19/68	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.N. CHURA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEV.
DETAILED [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FP-BR2A 1

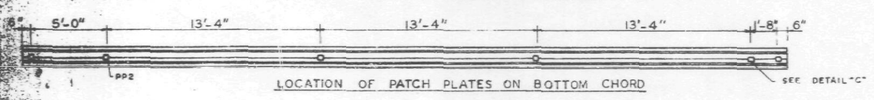


PANEL NO. C2B SIZE 20' x 59'-8 1/2"



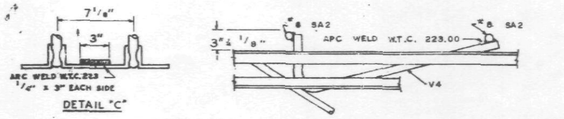


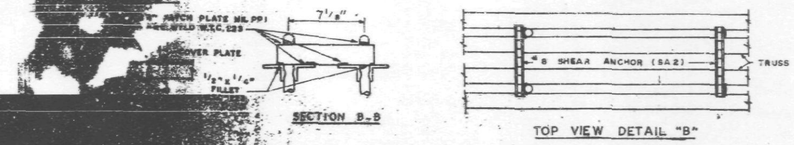
LOCATION OF PATCH PLATES ON TOP CHORD

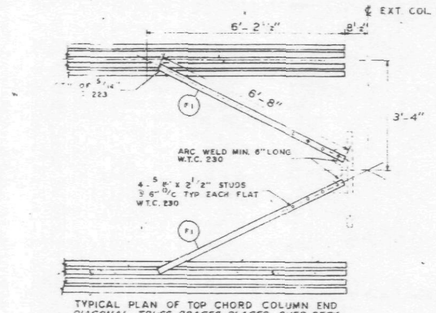


LOCATION OF PATCH PLATES ON BOTTOM CHORD

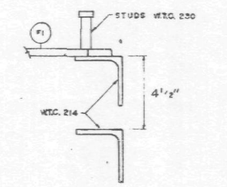
COVER PLATE PLACEMENT







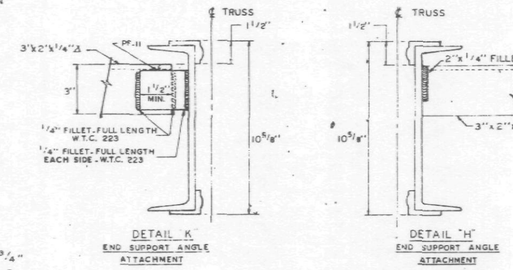
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

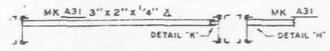


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

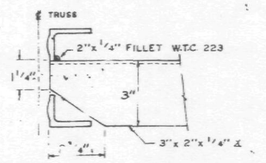
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	3	C32T14BL x 59'-8 1/2"	ST 214BL
	T14BR	3	C32T14BR x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	11/4" ⌀ 6'-8 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 8'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-5"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/2"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x1 1/2"x .25"x 0'-6"	ST 400
⅝ SHEAR ANCHOR	SA2	6	⅝ REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3"x 1/2"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie.- (JX)
ALL CONNECTION DETAILS FOR: FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

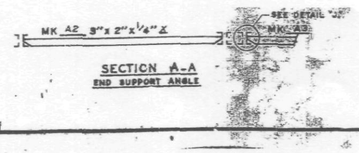




SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY

REF DRWG.		
7-AB3-28	10-4-68	
7-AB4-28	7-22-68	
7-AB1-13	10-4-68	
7-AB2-7	7-22-68	
7-AB2-15	10-4-68	

VOID

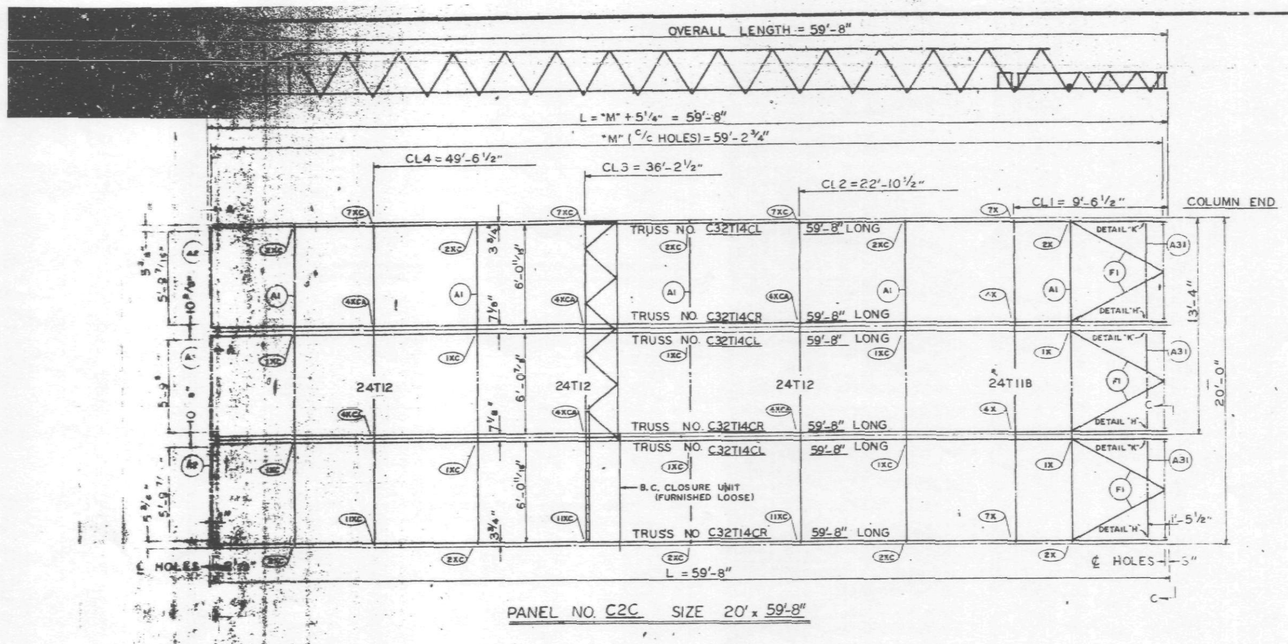
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

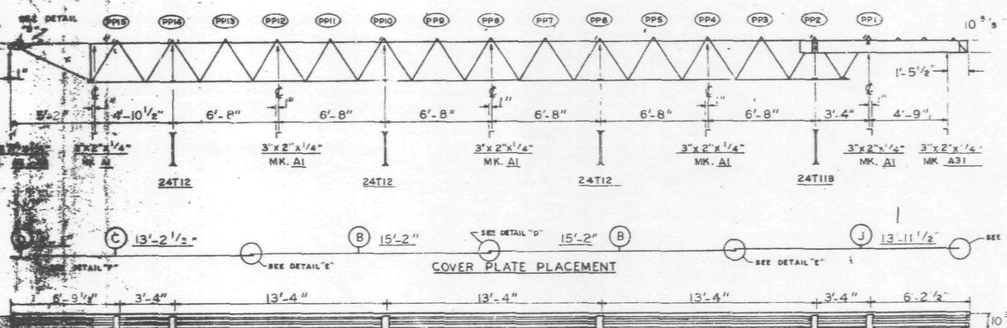
PANEL C2B -20' x 59'-8 1/2"

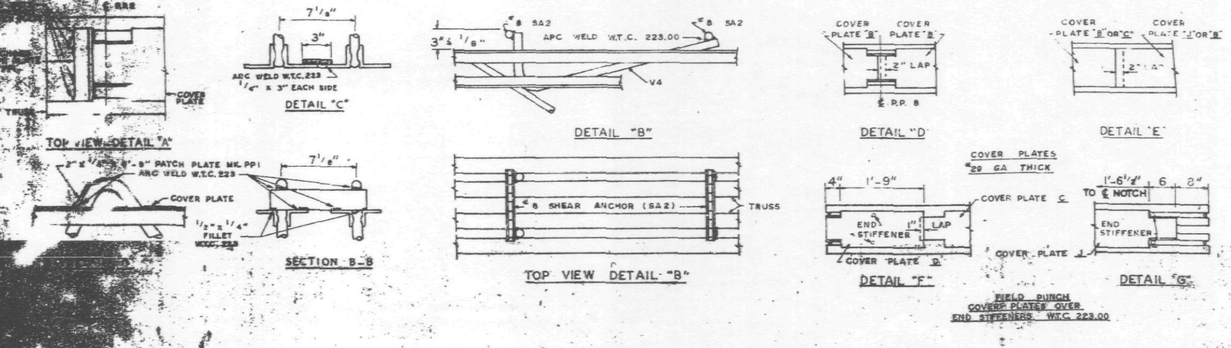
BLDG. B FLOORS 92 (WEST)

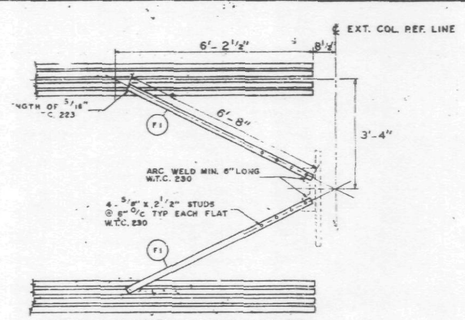
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-28	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.N. CHUMA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO. FP-C2B



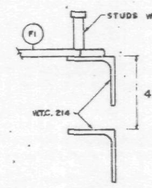
PANEL NO. C2C SIZE 20' x 59'-8"







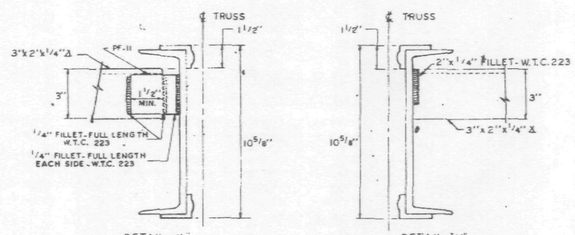
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

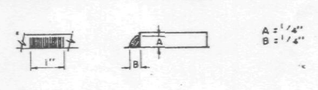


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

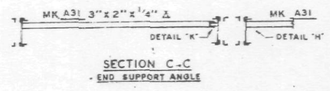
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	11/4" Ø 6'-8 1/2" TUBE	BT 212
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-11 9/16"	ST 403
	A3	1	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3" x 2" x 1/4" x 5'-8 1/2"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	11/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	5" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x .25" x 0'-6"	ST 400
ø8 SHEAR ANCHOR	SA2	6	ø8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	℄ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1x).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.





NO.	DATE	REVISION	BY

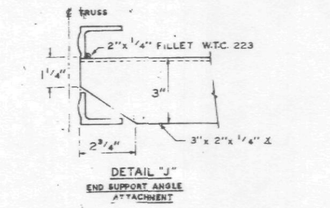


SECTION C-C
- END SUPPORT ANGLE

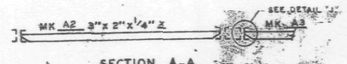
VOID

REF DRWG.

7-AB3-28	10-4-68
7-AB4-28	7-22-68
7-AB1-3	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL C2C - 20' x 59'-8"

BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-28 PLATE

APPROVED FOR FABRICATION BY _____ FOR P.O.N.Y.A. DATE

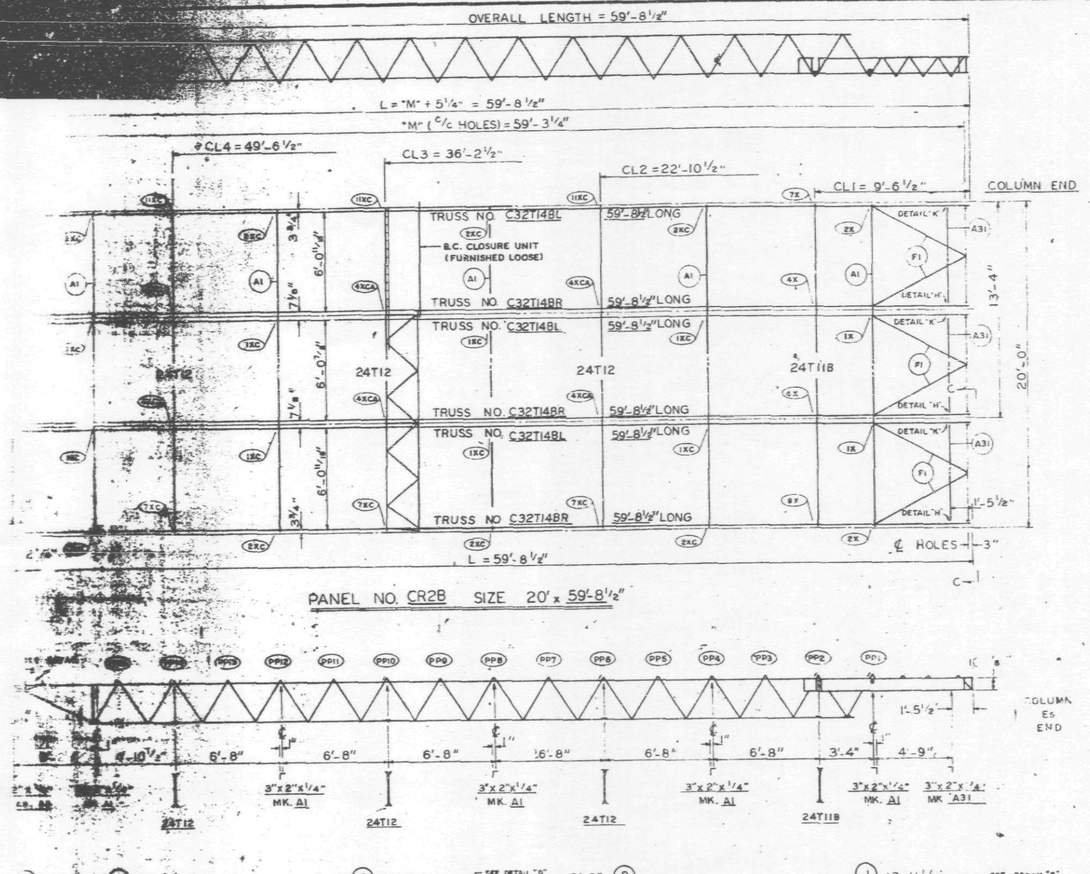
DRAWN BY [illegible] DATE APRIL 28, 1969

APPROVED FOR FABRICATION BY [illegible] FOR [illegible] DATE

CHECKED BY T.N. CHUNG DATE APRIL 28, 1969 IN CHARGE PROD. DEV.

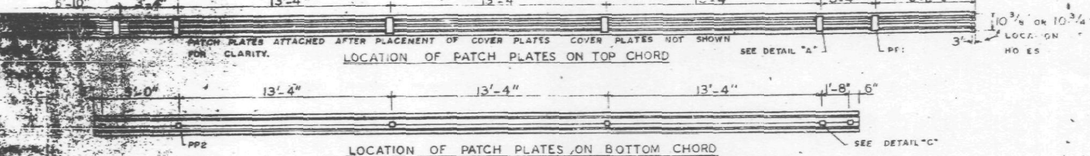
DETAILED BY A.G. WEISS

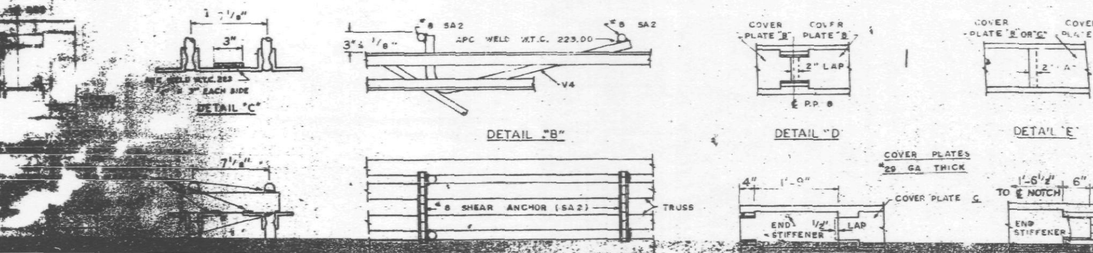
FABRICATION CONT. NO W.T.C. 221 SHEET FP C-2

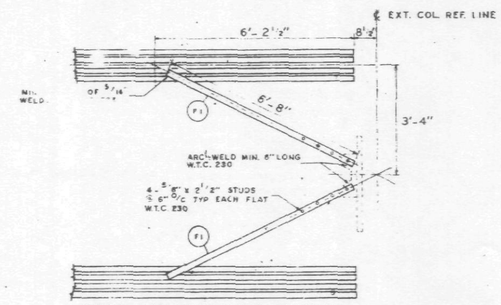


PANEL NO. CR2B SIZE 20' x 59'-8 1/2"

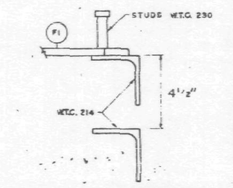
COVER PLATE PLACEMENT







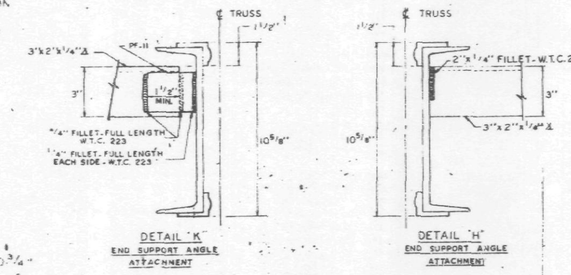
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



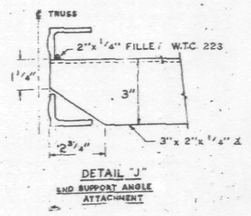
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	3	C32T14BL x 59'-8 1/2"	ST 214BL
	T14BR	3	C32T14BR x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	1 1/4" □ 8'-6 1/2" TUBE	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1'-2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	16	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/2"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x1 1/2"x .25"x 0'-6"	ST 400
3/8" SHEAR ANCHOR	SA2	6	3/8" REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ß x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3"x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (A)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-29	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2- 7	7-22-68
7-AB2-15	10-4-68

VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

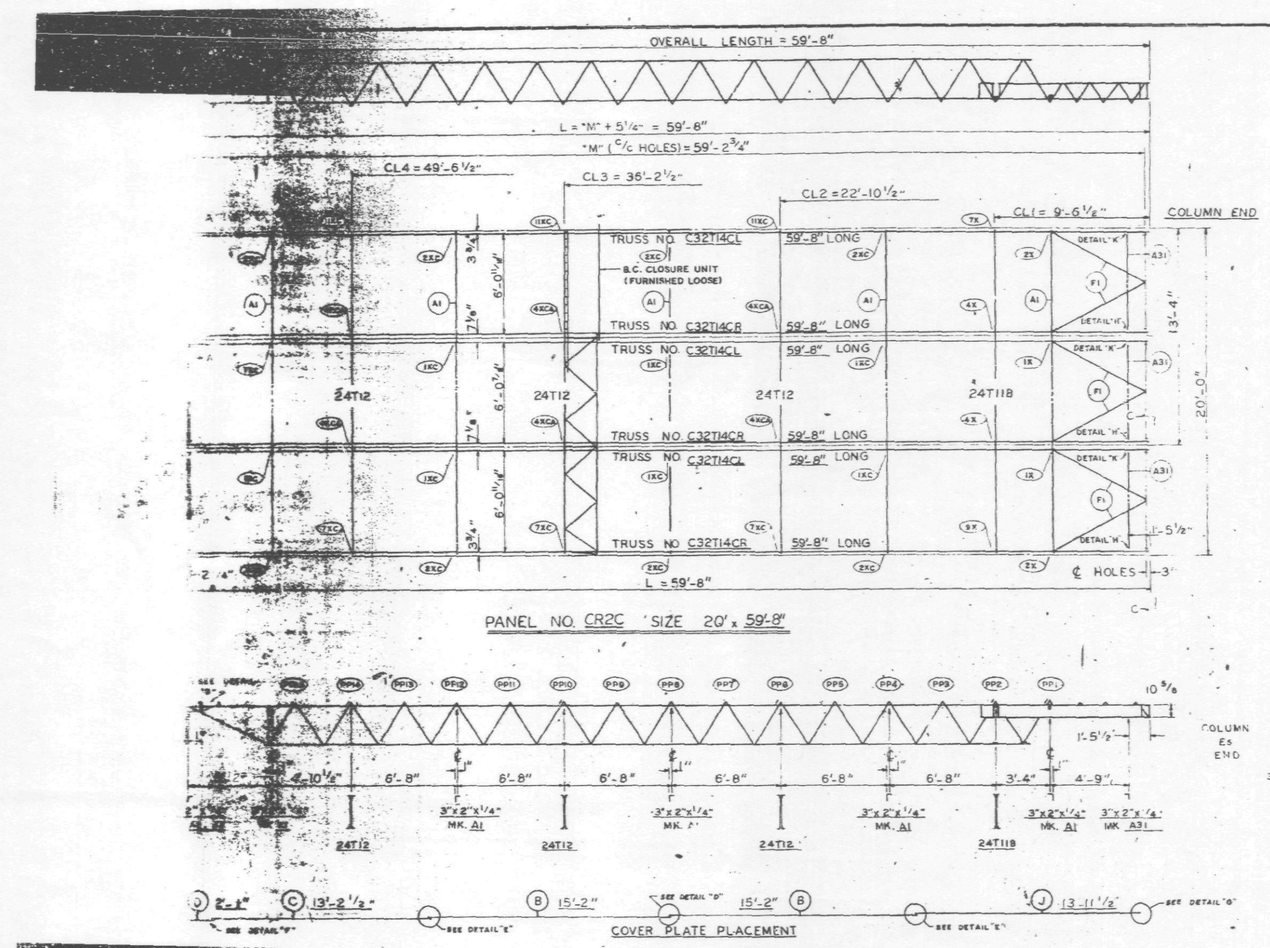
BLDG. A FLOORS 92 (NORTH)

PANEL CR2B - 20' x 59'-8 1/2"

BLDG. B FLOORS 92 (WEST)

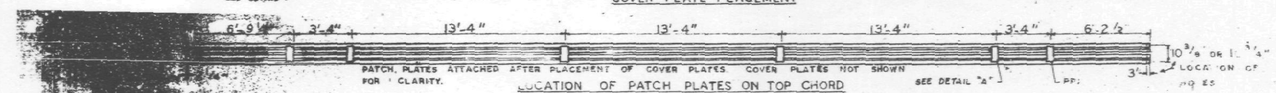
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED	DESIGN DRAWING NO.
	7-AB3-29
BY	DATE
	APRIL 28, 1969
BY	DATE
	APRIL 28, 1969

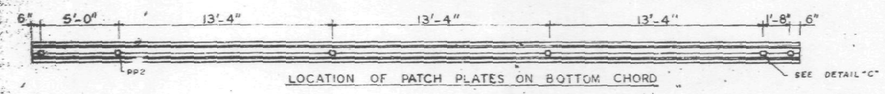


PANEL NO. CR2C SIZE 20' x 59'-8"

COVER PLATE PLACEMENT



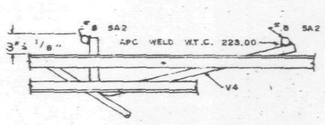
LOCATION OF PATCH PLATES ON TOP CHORD



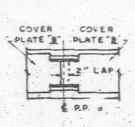
LOCATION OF PATCH PLATES ON BOTTOM CHORD

SECTION B-B

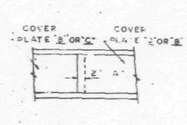
DETAIL "C"



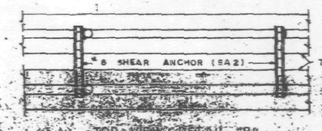
DETAIL "B"



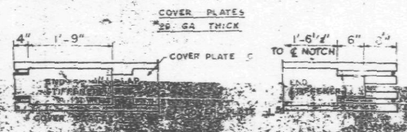
DET. "D"



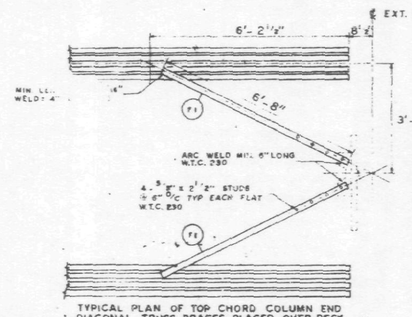
DETAIL "E"



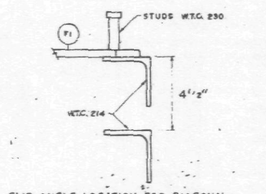
TOP VIEW DETAIL "B"



DETAIL "J"



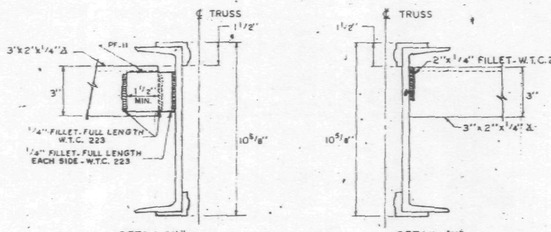
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1 1/4" D 8'-8 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 8'-8 1/2"	ST 410
CLOSURE PLATES	PP-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 5/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	8 1/2" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x .25" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3"x 1/2"x 1'-2"	ST 409

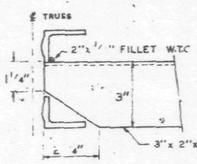
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1K)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.



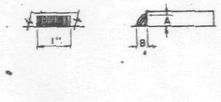
DETAIL "K" END SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-29	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2- 7	7-22-68
7-AB2-15	10-4-68

VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL CR2C - 20' x 59'-8"

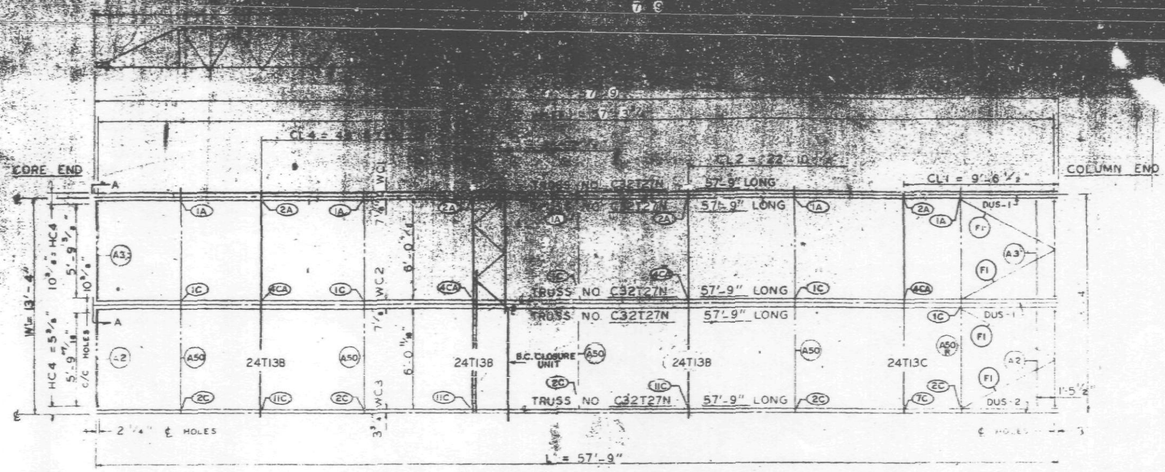
BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

DESIGN DRAWING NO. 7-AB3-29

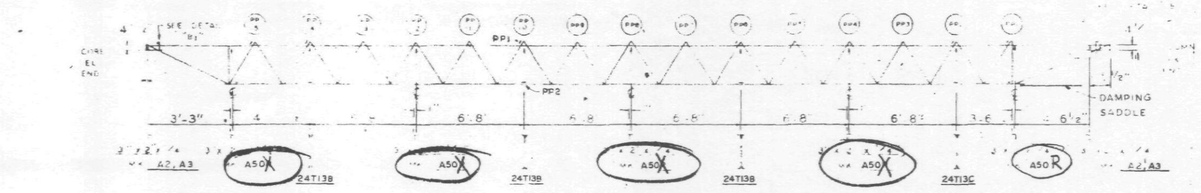
DRAWN BY [illegible]
APRIL 28, 196[illegible]

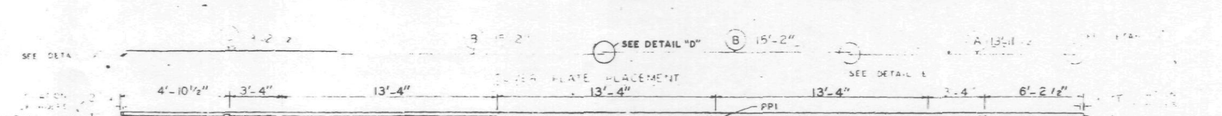
CHECKED BY [illegible]
APRIL 28, 196[illegible]

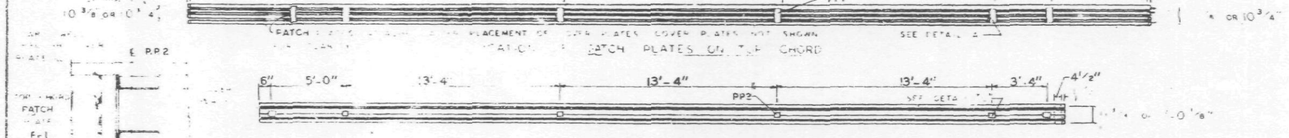


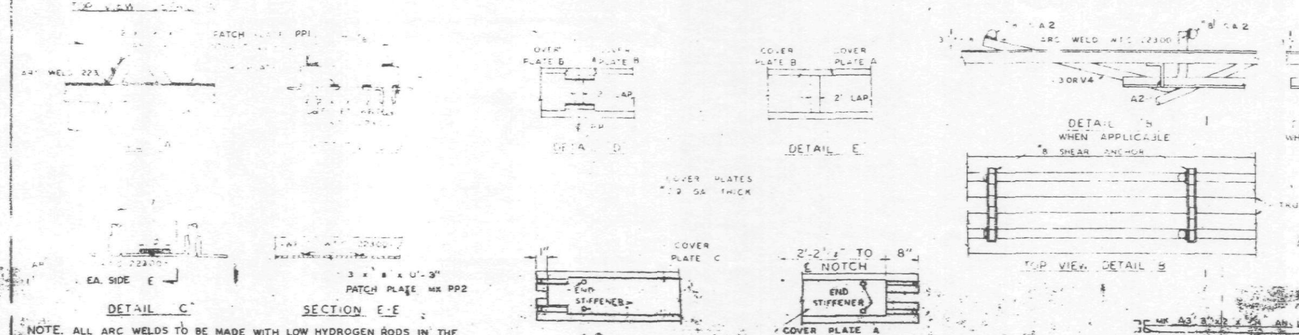
PANEL NO. C6N SIZE 13'-4" x 57'-9"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUNCHED IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

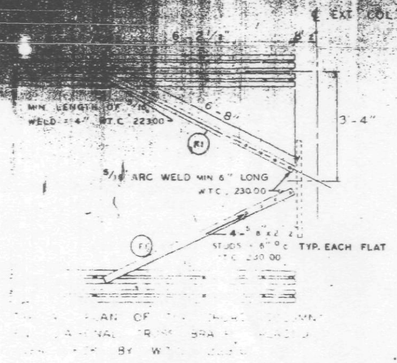








NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

FLOOR TRUSSES	T13B	3	24T13B - 14'-1 1/2"	BT 2138
	T13C	1	24T13C - 14'-1 1/2"	BT 2138
3"x2"x1/4" ANGLE	A2	2	3"x2"x1/4"x5'-11 9/16"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
	A50	4	3"x2"x1/4"x14'-1 1/4"	ST 413
	A50R	1		
DIAGONAL FLATS	F1	4	1" 2"x 5 8"x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1 4" x 0'-9"	ST 400
	PP2	18	3"x 3 8"x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0.35" x 3'-11 1/2"	ST 303
	B	6	9" x 0.35" x 15'-2"	ST 303
	C	3	9" x 0.35" x 13'-2"	ST 303
ANGLE CLIPS	CL	13	2"x 1 1/2"x 1/4"x 0'-8"	ST 400
3/4" SHEAR ANCHOR	SA2	9	3/4" ø STUD x 0'-5"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2"x3 1/2"x 3/8"x 3'-3 7/8"	ST 298
	DUS-2		3 1/2"x3 1/2"x 3/8 x 3'-6 7/8"	T 298
CONNECTION BAR	CB1	4	1" 5/8 x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3 7/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P14	4	3"x 1 2" x 0'-11"	ST 416
CLOSURE UNIT	BC	3	1 1/4" O 6'-6 1/2" TUBE	BT 2138

NUMBERS AND LETTERS IN ELLIPSES ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 229.

NO.	DATE	REVISION	BY

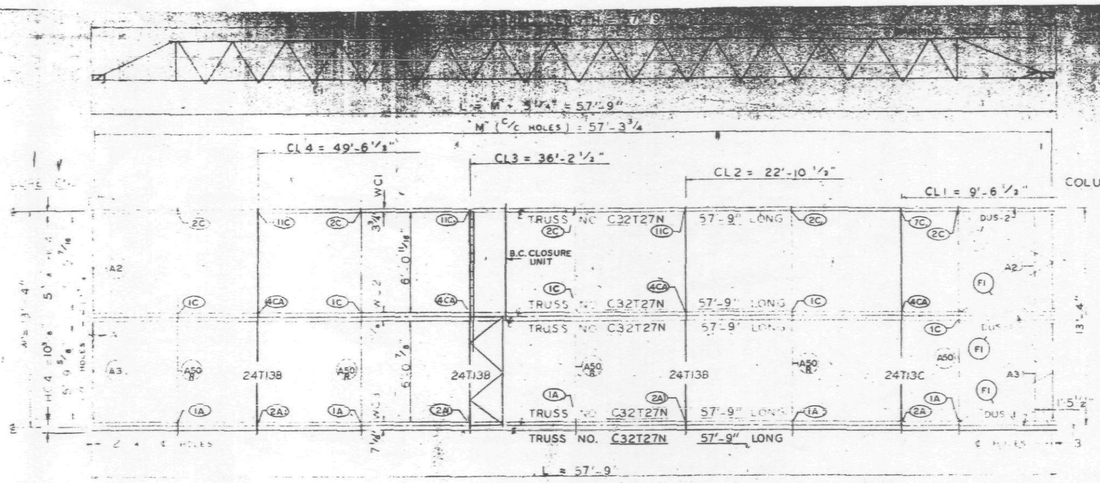
SKILLING-HELLE CHRISTIANSEN-ROBERTSON Structural Steel Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 4/23/69 By SK

REF DRWG
7-AB4 15.1 10-4-68
7-AB4 15 & 16 7-22-68
7-AB4 42 10-15-68
SA 24 1-8-69
7-AB3 77 1-6-69
7-AB1 24 1-6-69
7-AB2 6 7-22-68

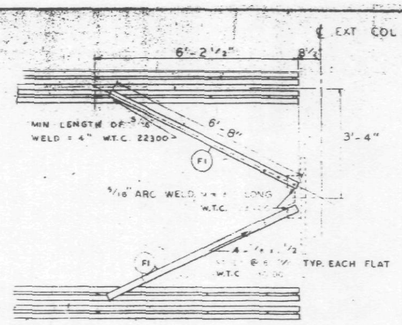
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (NORTH ONLY)
PANEL C6N - 13'-4" x 57'-9"
BLDG. B FLOORS 44 (WEST ONLY)

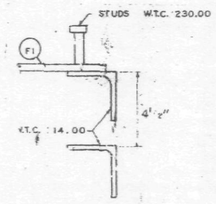
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-77 PLATE
APPROVED FOR FABRICATION BY ____ FOR PONYA DATE
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR DATE
DRAWN BY DATE MARCH 24, 1969
CHECKED BY J.R.PAIR DATE MARCH 24, 1969
IN CHARGE OF SHOP DRW.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER
FABRICATION CONT NO. WIC 221
SHEET NO. FP-C6N



PANEL NO. CR6N SIZE 13'-4" x 57'-9"



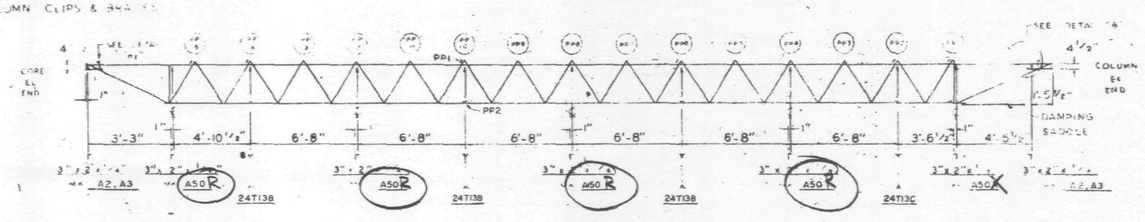
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

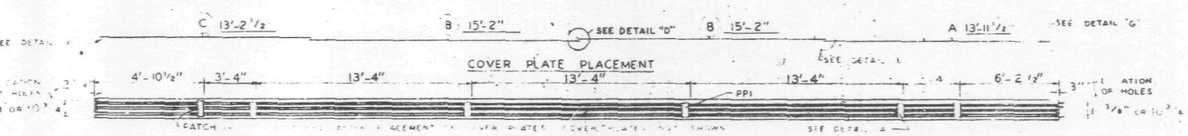


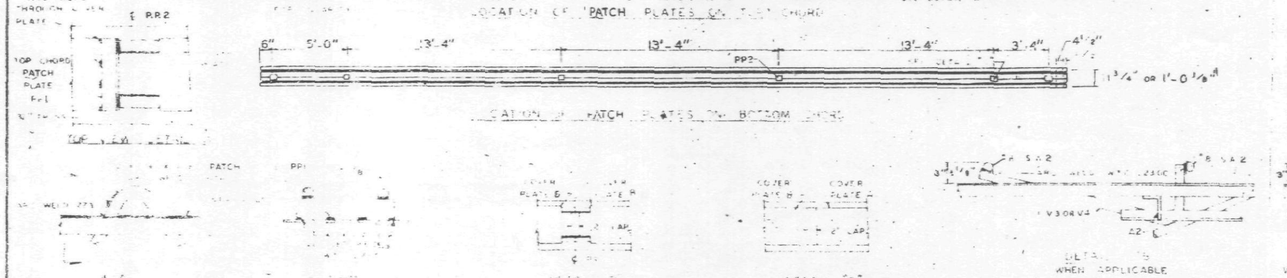
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL				
MATERIAL	MK	PCS		
FLOOR TRUSSES	T27N	5	C32T27N - 57'-9"	ST 2.27N
GIRDER TRUSS	T13B	3	24T13B - 14'-1 1/2"	ST 213B
	T13C	1	24T13C - 14'-1 1/2"	ST 213C
STRUCTURAL ANGLE	A2	2	3" x 2 1/2" x 1/4" x 9'-11 9/16"	ST 403
	A3	6	3" x 2 1/2" x 1/4" x 5'-11 3/4"	ST 403
	A50	1	3" x 2 1/2" x 1/4" x 14'-1 1/4"	ST 413
	A50R	4		
DIAGONAL FLATS	F	4	2" x 6" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1'-0 9/16"	ST 400
	PP2	18	3" x 1'-0 3/16"	ST 400
	A	3	3" x 0'-3 5/8" x 3'-0 1/2"	ST 203
CLOSURE PLATES	B	6	3" x 0'-2 5/8" x 1'-5 1/2"	ST 403
	C	3	3" x 0'-3 5/8" x 1'-2"	ST 403
ANGLE CLIPS	C	13	2" x 1 1/2" x 1'-4" x 0'-6"	ST 400
STUD SHEAR ANCHOR	SA2	9	3/4" ø STUD x 0'-5"	ST 400
DAMPING SADDLE	DUS-1	2	3" x 3" x 3/8" x 3'-5 7/8"	ST 298
	DUS-2		3" x 3" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" P x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3 7/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-8"	ST 400
	P3		4 1/2" x .39" x 1'-0"	ST 400
	P4	4	3" x 1" x 0'-11"	ST 416
CLOSURE UNIT	BC	3	11" □ 6'-6 1/2" TUBE	BT 213B

BC & DIMENSION HOLE AND HEAVY TO HOLES NOT IN BEARING END OF FLOOR TRUSSES ARE IN THE SIMILAR WITH BUT NOT EXACT LOCATION WITH HOLE C ON THE COLUMN CLIPS & BRACES







NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ø 84" FULL THROAT FILLET.

NUMBERS AND LETTERS IN ELLIPSES ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 229.

NO.	DATE	REVISION	BY

REF DRWG
- ARP 15.1 10-4-68
- [illegible] 7-22-68
- [illegible] 42 10-15-68
- [illegible] 1-6-69
- [illegible] 78 1-8-69
- [illegible] 24 1-6-69
- [illegible] 7-22-68

SLAIT, KAHN, LING, PELLE, CHRISTIANSEN, ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
4/23/69 BY [illegible]

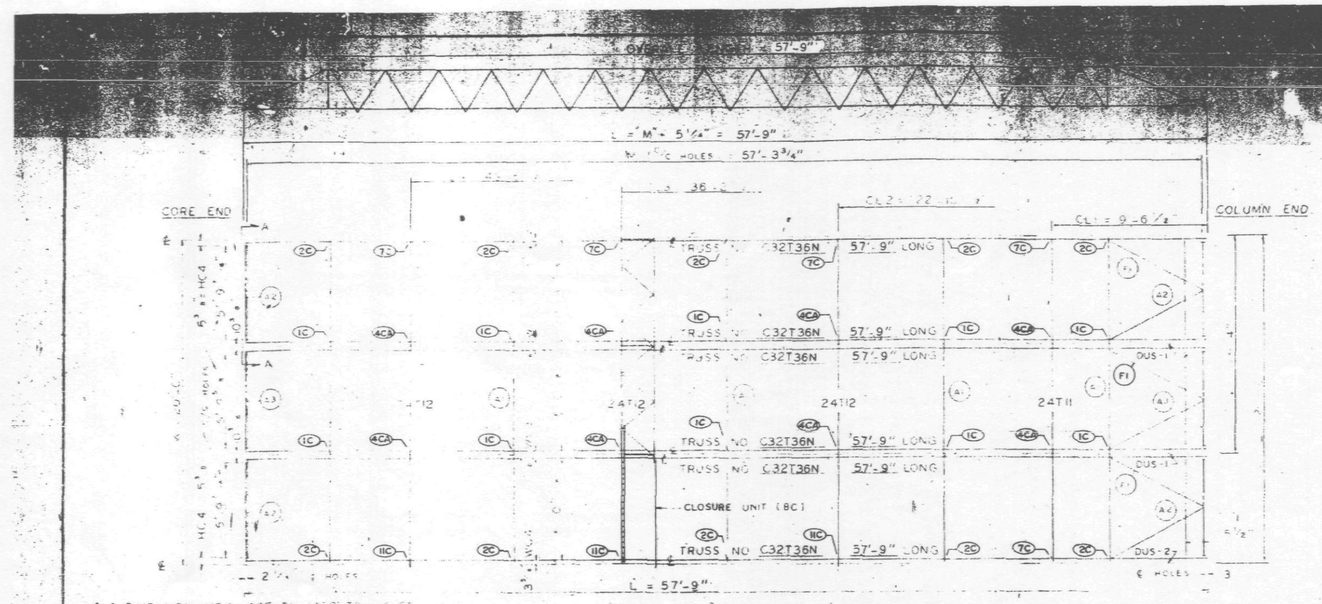
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS - 44 (NORTH ONLY)
PANEL CR6N 13'-4" x 57'-9"
BLDG. B FLOORS - 44 (WEST ONLY)

FABRICATION BY LACLEDE STEEL COMPANY

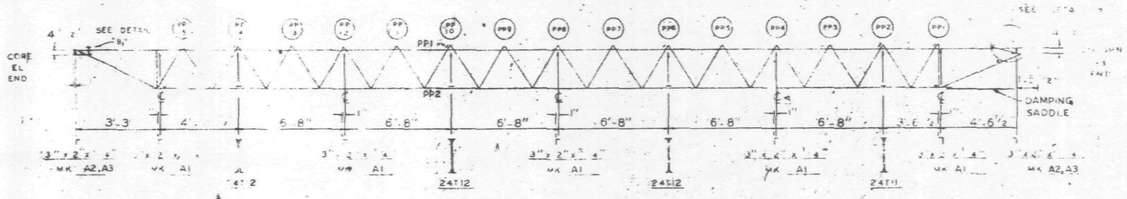
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-ABS-38	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE	DRAWN BY [illegible] DATE MARCH 24, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE MARCH 24, 1969	IN CHARGE OF SHOP DET.
DETAILED BY D.C. WEBB		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-CR6N

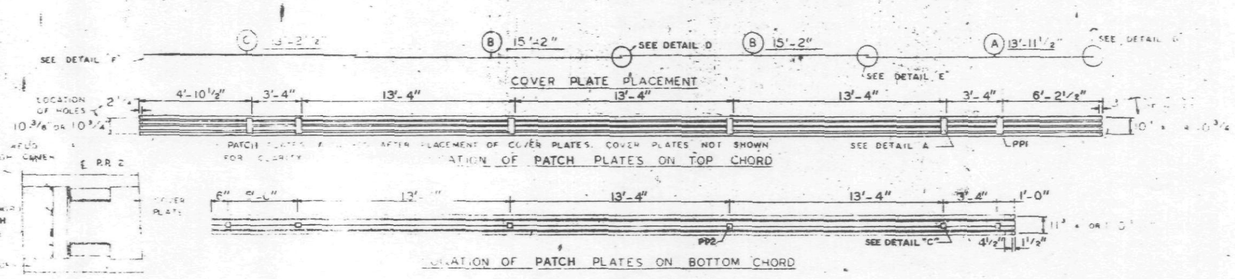
LACLEDE STEEL CO.



C & D DIMENSION HC4 ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES AND ARE PARALLEL WITH BUT NOT EXACTLY ALIGNED WITH HOLES IN THE COLUMN CLIPS & BRACES

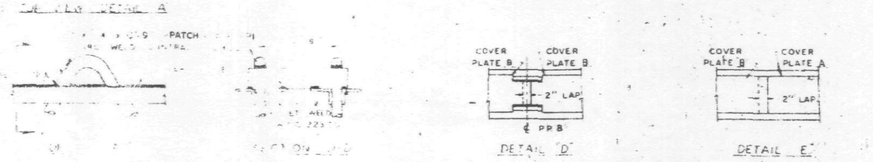
PANEL NO. C8N SIZE 20'-0" x 57'-9"

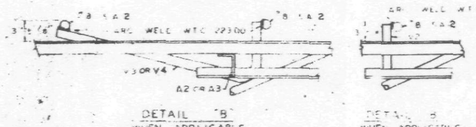




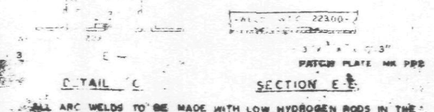
LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD



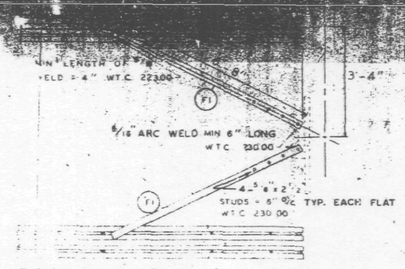


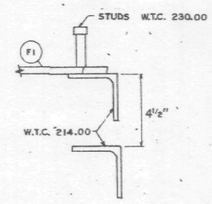
COVER PLATES 20 GA THICK



ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-90 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FILLET WELDS.

SHOP PUNCH COVER PLATES OVER END STIFFENERS WT. 6.0 LBS





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REF DRWG

TRUSS	C32T36N - 57'-9"	ST 236N

BRIDGING TRUSSES					
3" x 2 1/2" ANGLES					
DIAGONAL FLATS	F1	6	1/2" x 5/8" x 0'-4 1/2"	ST 402	
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400	
	PP2	18	3" x 3/8" x 0'-3"	ST 400	
COVER PLATES	A	3	9" x .0135" x 13'-11 7/8"	ST303	
	B	6	9" x .0135" x 15'-2"	ST 303	
	C	3	9" x .0135" x 13'-2 7/8"	ST 303	
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-8"	ST 400	
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-6"	ST 400	
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-8 7/8"	ST 298	
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-8 7/8"	ST 298	
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400	
CLOSURE UNIT	BC	3	2 @ 1 1/2" x 1 1/2" x	BT 212	
			240 x 6'-6 1/2"	CD 204	
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400	
	P2	4	4 1/2" x .39" x 0'-9"	ST 400	
	P3	1	4 1/2" x .39" x 1'-0"	ST 400	

140 + 462

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

REF DRWG

7-AB4-19	12-20-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA-124	1-6-69
7-AB3-56	1-6-69
7-AB1-32	1-6-69
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

SKILLING-HELLE CHRISTIANSEN-ROBERTSON Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
REJECTED
Date 4/23/69 SK

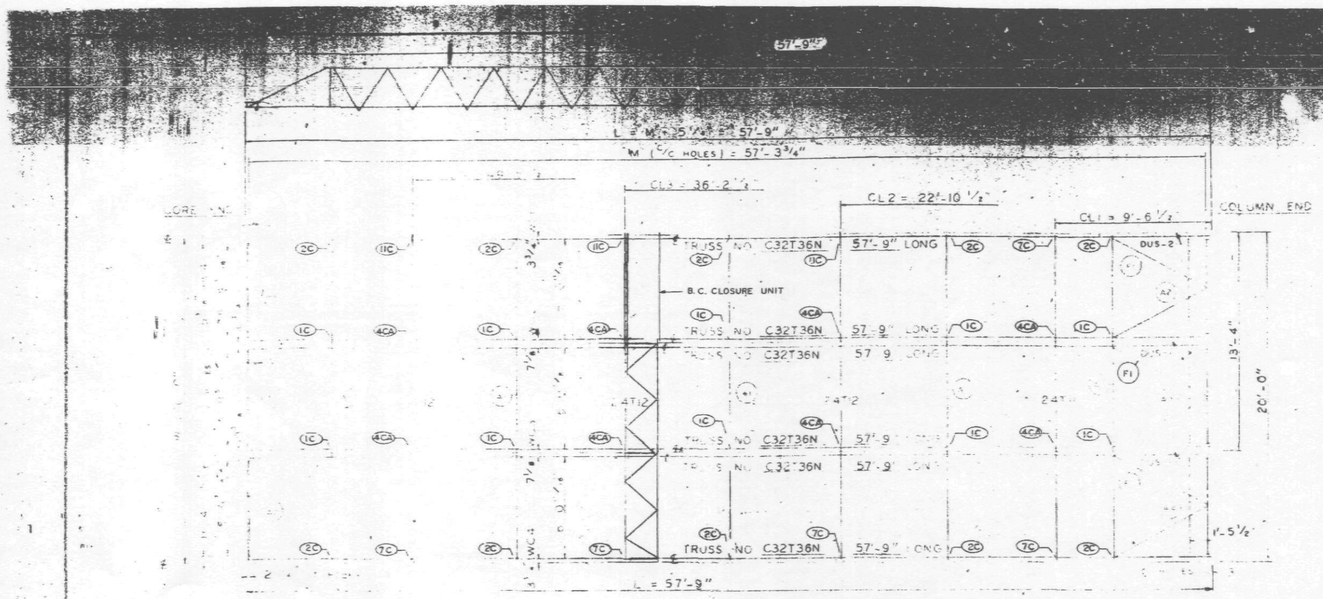
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOORS 44 (SOUTH ONLY)

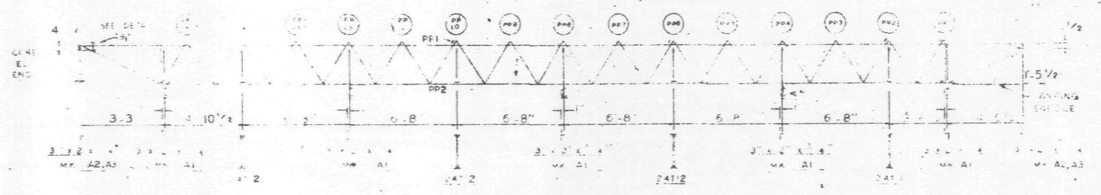
PANEL C8N - 20'-0" x 57'-9"

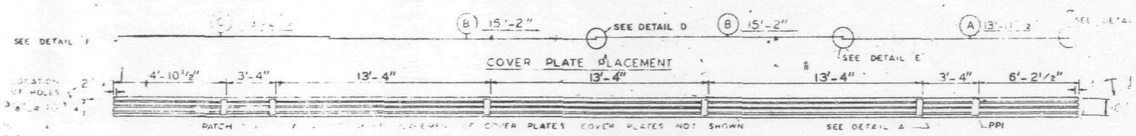
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY ... FOR PONYA DATE
APPROVED FOR FABRICATION BY ... FOR FABRICATOR DATE
LACLEDE STEEL CO. DETAILED BY A.S. WEBER

DESIGN DRAWING NO 7-AB3-59 PLATE
DRAWN BY ... DATE MARCH 31, 1969
CHECKED BY T.M. CHURA DATE MARCH 31, 1969
IN CHARGE OF DRAFTING DEPT
FABRICATION CONT. NO. W.C. 221
SHEET NO CD C8N



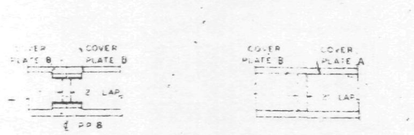
PANEL NO CR8N SIZE 20'-0" x 57'-9"

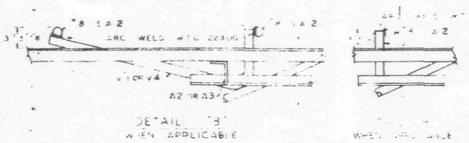


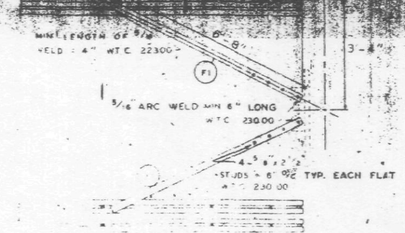


LOCATION OF PATCH PLATES ON TOP CHORD

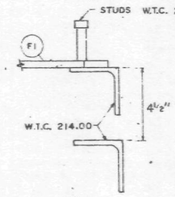
LOCATION OF PATCH PLATES ON BOTTOM CHORD







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

	MK.	NO.	C32T36N - 57'-9"	REF. DRWG. ST 236N
BRIDGING TRUSSES	BT1		24AT12 @ 10'-11"	ST 212
	BT2		24AT12 @ 10'-11"	ST 212
3" x 2" x ¼" ANGLE	A1		3" x 2" x ¼" x 10'-11"	ST 403
	A2	6	3" x 2" x ¼" x 10'-11"	ST 403
	A3	6	3" x 2" x ¼" x 10'-11"	ST 403
DIAGONAL FLATS	F1	6	1½" x ⅜" x 0'-8"	ST 402
PATCH PLATES	PP1	18	2" x ⅞" x 0'-8"	ST 400
	PP2	8	3" x ⅜" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11"	ST 303
	B	6	9" x .0135" x 15'-2½"	ST 303
	C	3	9" x .0135" x 13'-2"	ST 303
ANGLE CLIPS	C1	24	2" x 2" x ¼" x 0'-6"	ST 400
⌀ 8 SHEAR ANCHOR	SA2	9	⌀ 8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3⅞" x 3½" x 3⅜" x 3-7/16"	ST 298
	DUS-2	1	3½" x 3½" x 3⅜" x 3-7/16"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-4 x 1½" x 1¼" x 230 x 6'6½"	ST 212 CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-8½"	ST 400
	P2	4	4½" x .38" x 0'-9"	ST 400
	P3	1	4½" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

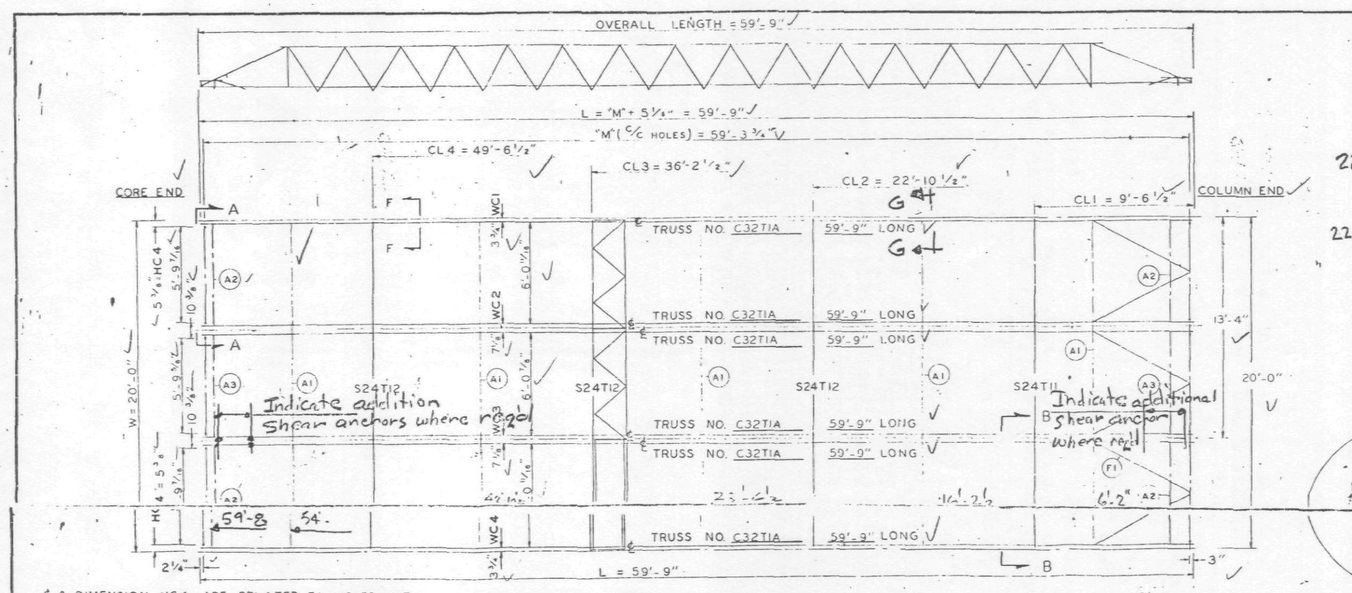
7-AB4-19	12-20-68
	10-15-68
AB4 1 & 5	7-22-68
AB4 41	7-22-68
	1-6-69
AB4 57	1-8-69
AB4 32	1-8-69
AB4 1 & 7	7-22-68
AB4 42	10-15-68

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
REJECTED
Date 4/23/69 SK

FOR PANEL DATA
WITH TRAFFIC OVER
FOR
THE PORT OF NEW YORK AUTHORITY
GEORGE WASHINGTON BRIDGE
LOWER LEVEL SECTION 44 (SOUTH ONLY)
PANEL CR8N 20'-0" x 57'-9"

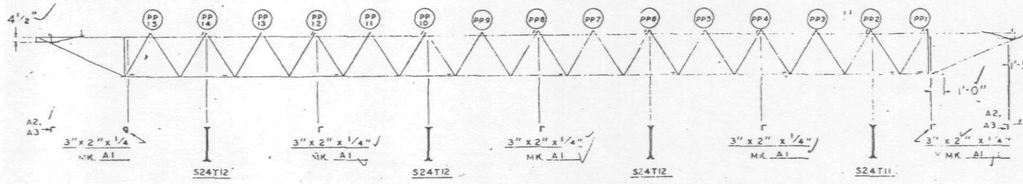
FABRICATION BY LACLEDE STEEL COMPANY
AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-57 PLATE
APPROVED FOR FABRICATION BY FOR PONYA DATE
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DRAWN BY DATE MARCH 31, 1969
CHECKED BY T.M.CHURA DATE MARCH 31, 1969
FABRICATION CODE NO. SHEET NO. CR8N
LACLEDE STEEL CO.

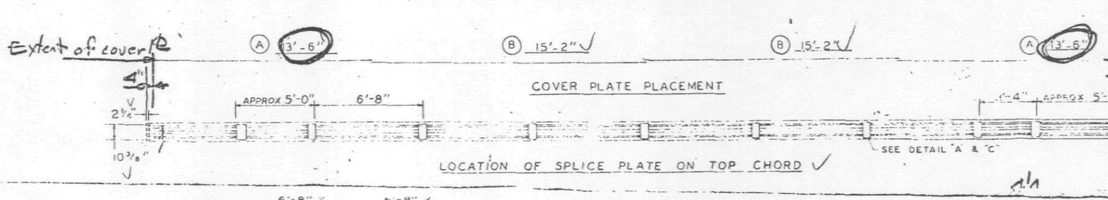
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS (E-70) SEVES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT
A = 1/4
B = 1/4

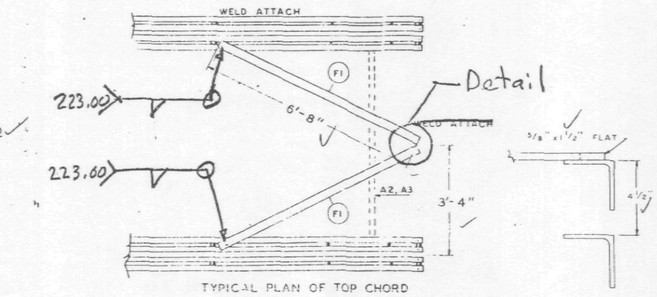


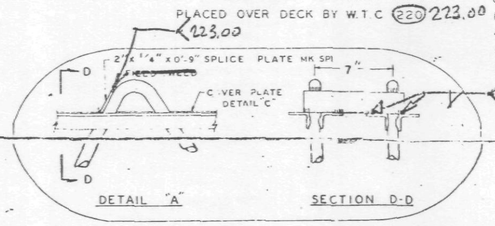
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

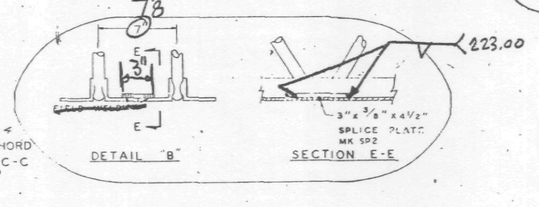
PANEL NO. C1A SIZE 20', 59'-9"





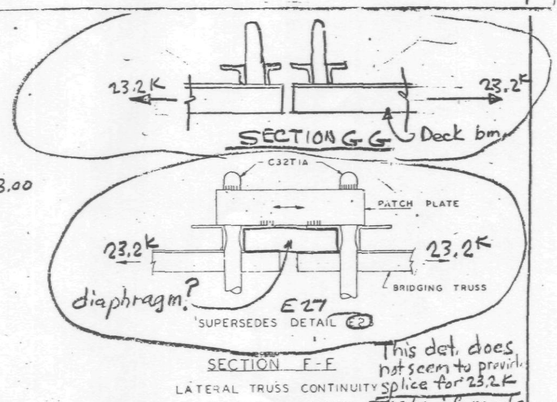






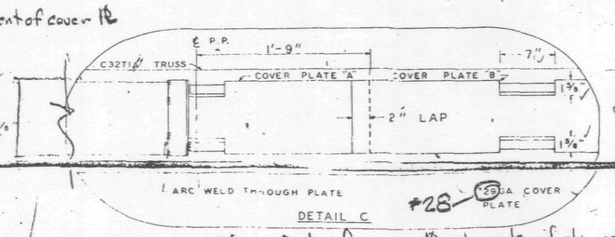
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1A	6	C32T1A - 59'-9"	ST 101A
BRIDGING TRUSSES	T11	1	S24T11 - 19'-11"	ST211
	T12	3	S24T12 - 19'-11"	ST 212
3"x2"x¼" ANGLE (Fy = 50 ksi)	A1	5	3"x2"x¼"x 19'-11"	ST 301
	A2	4	3"x2"x¼"x 5'-11 5/8"	ST 301
	A3	2	3"x2"x¼"x 5'-11½"	ST 301
DIAGONAL FLATS	F1	6	1½"x⅜"x 6'-8"	ST 301
SPLICE PLATES (Fy = 36 ksi)	SP1	33	2"x¼"x 0'-9"	ST 401
	SP2	27	3"x⅜"x 4½"	ST 401
COVER PLATES	A	6	9"x .0135 (3'-6")	ST 401
	B	6	9"x .0135 x 15'-2"	ST 401
ANGLE CLIPS	C1	24	2"x1½"x¼"x 0'-6"	ST 401

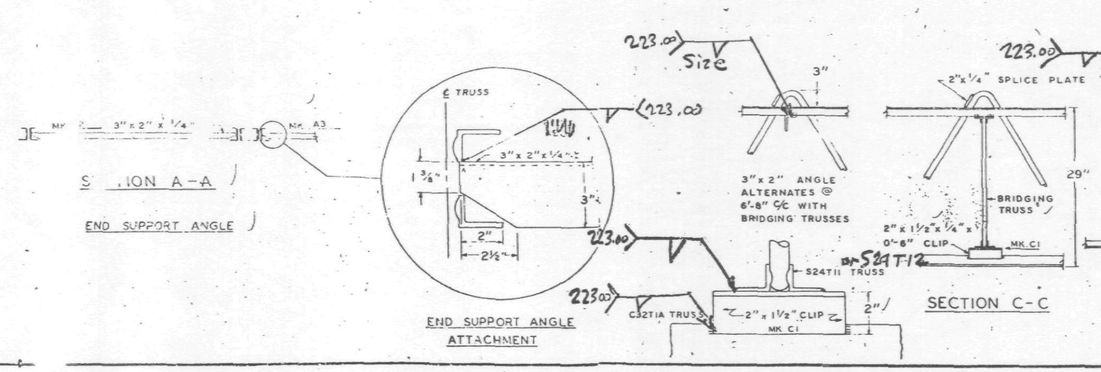


This det. does not seem to provide splice for 23.2K

Tests if made must have procedure approved by Sklcr. prior to start of testing work.



Show Det. of cover ℄ at ends of truss

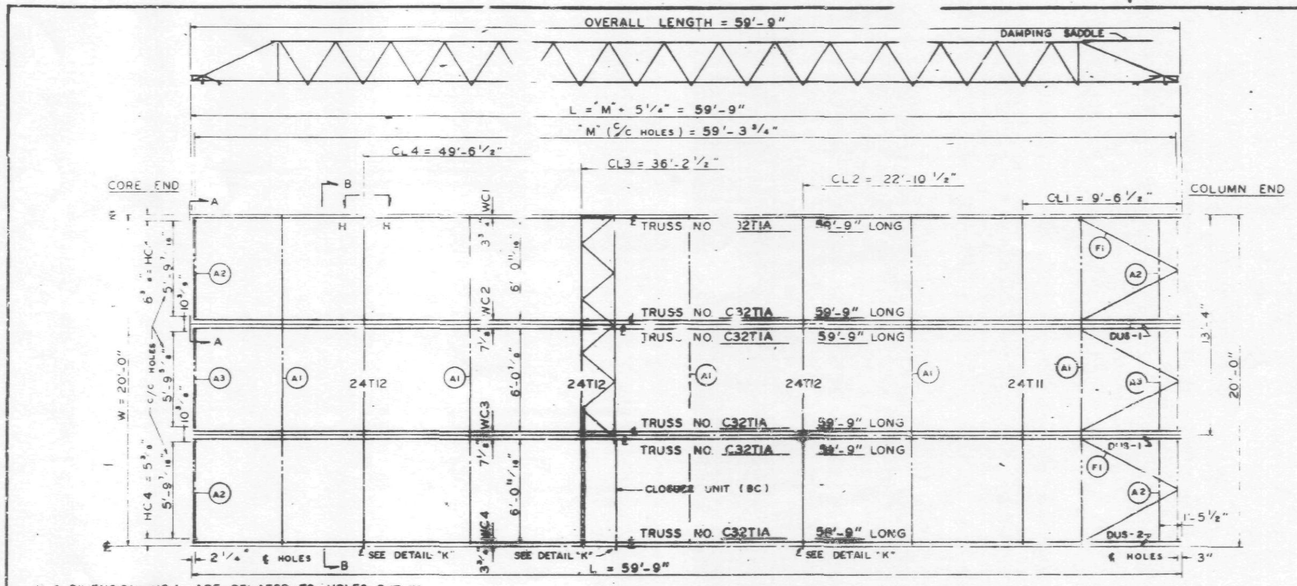


SKILLING - HELLE CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☐ APPROVED AS NOTED
☒ RESUBMIT
☐ REJECTED
Date 1-30-68 LWR

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

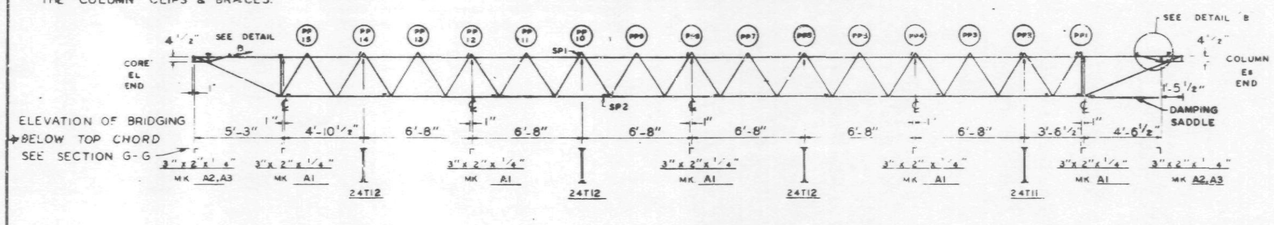
BLDG A - FLOORS 12-24, 26-38 (NORTH & SOUTH), 49-58, 60-66, 68-69 (NORTH)
PANEL C1A - 20'-0" x 59'-9" LONG (No Req'd)

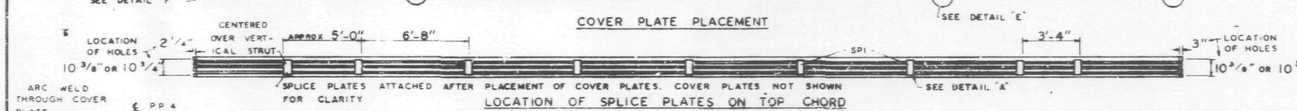
FABRICATION BY: LACLEDE STEEL COMPANY			
FABRICATED AT: MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-7 10-20-67	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: S.W.R. DATE: JAN. 1, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: J.B. PAUL DATE: JAN. 1, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-C1A

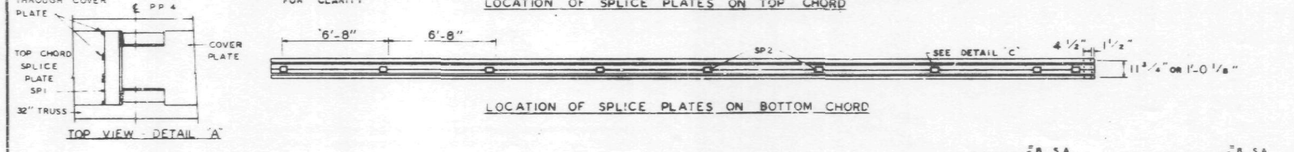


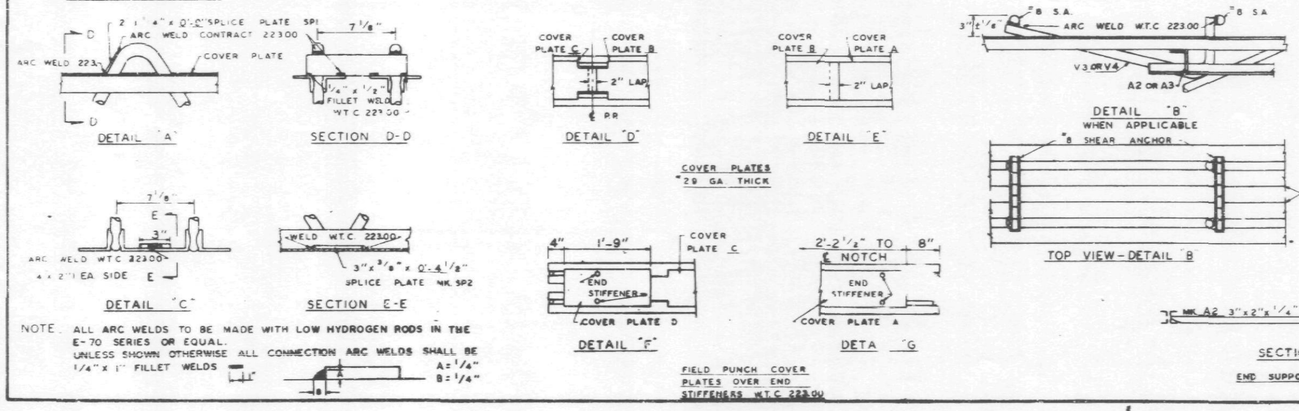
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. C1A SIZE 20'-0" x 59'-9"

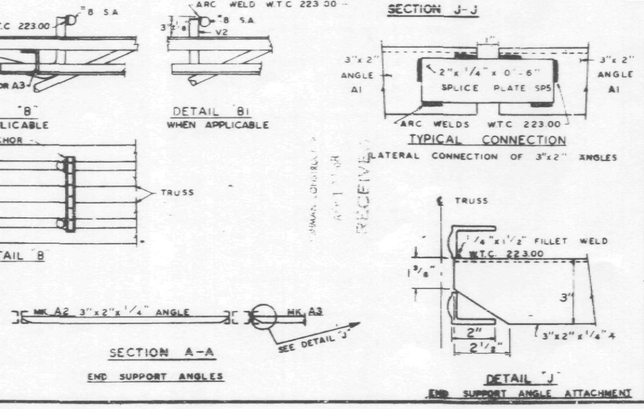


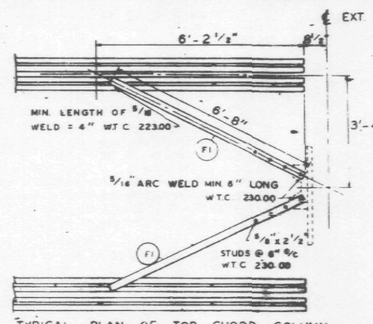


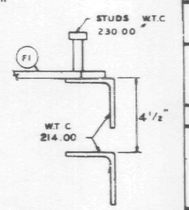




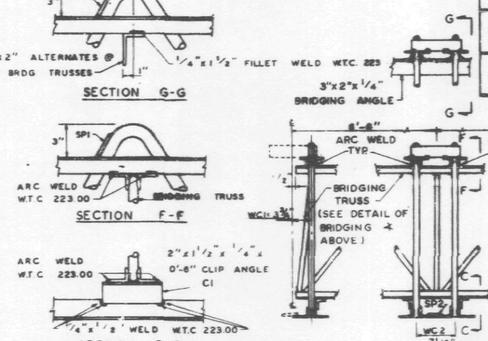
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE A = 1/4" B = 1/4"

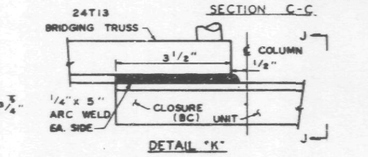


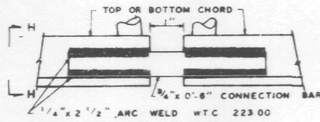


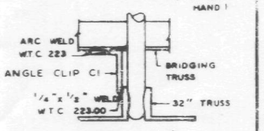


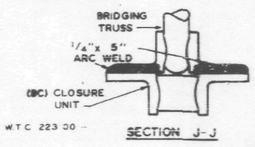
REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1A	45	[illegible] 59'-9"	ST201A
BRIDGING TRUSSES	T1L	1	[illegible] 19'-11"	BT211
	T12	3	[illegible] 19'-11"	BT212
3"x2"x1/4" ANGL.		5	3"x2"x1/4"x [illegible]	ST400
	A2	4	3"x2"x1/4" x 5'-11 5/8"	ST400
	A3	2	3"x2"x1/4" x 5'-11 1/2"	ST400
DIAGONAL FLATS	F1	6	1 1/2"x 3/8" x 6'-8"	ST400
SPLICE PLATES	SP1	7	2"x1/4"x 0'-9"	CD201
	SP2	27	3"x3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x1/4"x 0'-8"	CD201
COVER PLATES	A	3	9"x.0135"x 13'-11 1/2"	ST303
	B	6	9"x.0135"x 15'-2"	ST303
	C	3	9"x.0135"x 13'-2 1/2"	ST303
	D	3	9"x.0135"x 1'-9"	ST303
ANGLE CLIPS	C1	21	2"x1 1/2"x1/4"x0'-6"	CD201
ø 8 SHEAR ANCHOR	SA	12	ø 8 REBAR x 0'-9"	CD201
DAMPING SADDLE	DUS1	2	3 1/2"x3 1/2"x 3/8"x3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x3'-7 3/8"	ST298
CONNECTION BAR	CB	10	3/4"ø x 0'-6"	CD201
CLOSURE UNIT	BC	3	2 1/2"x1 1/2"x 1 1/4"x [illegible] 230 x 6'-4"	BT212 CD204

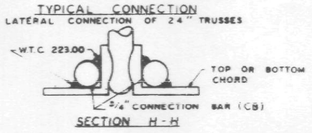












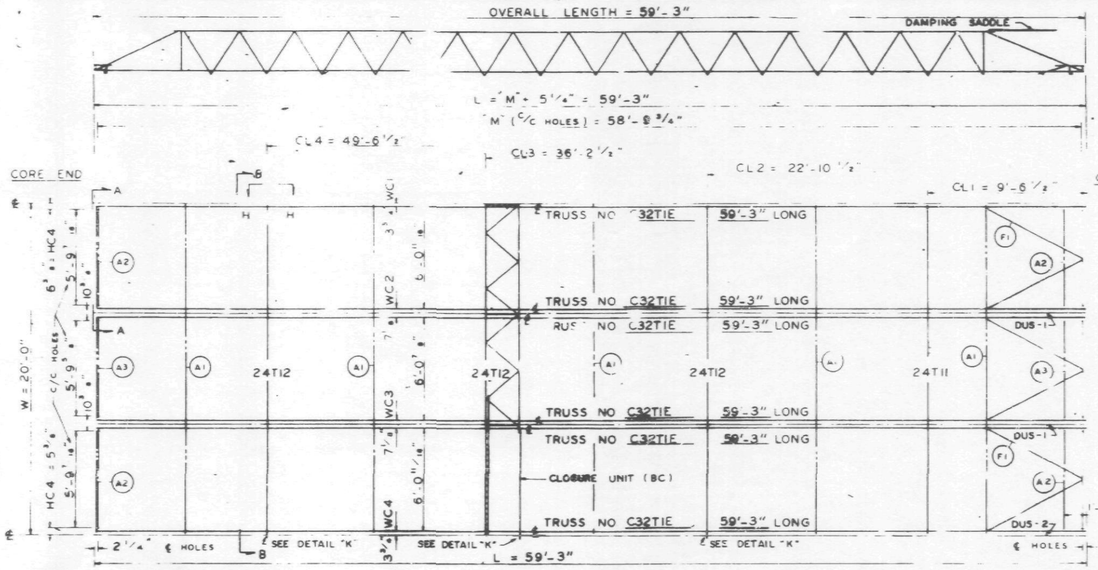
REF DRWG		
7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	1-3-68
7-AB4-39-41	1-3-68
SA-124	10-20-67
7-AB3-2	1-3-68
7-AB1-2	2-15-68
7-AB2-6 & 7	2-15-68
7-AB4-42	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-30 (NORTH & SOUTH); 49-50, 60-66, 68, 69 (NORTH) PANEL C1A - 20'-0" x 59'-9"

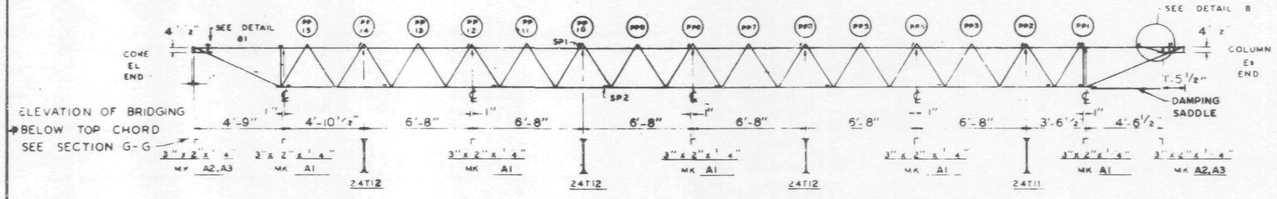
FABRICATION BY LACLEDE STEEL COMPANY

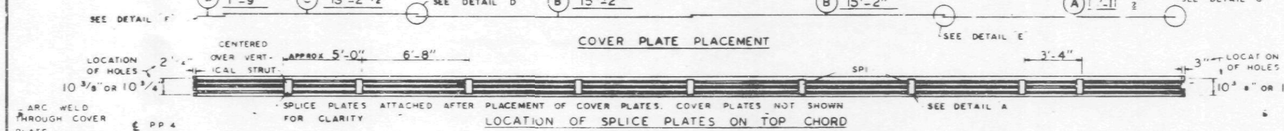
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 4-1-68 PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE APRIL 10, 1968 IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221 SHEET NO FP C1A



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

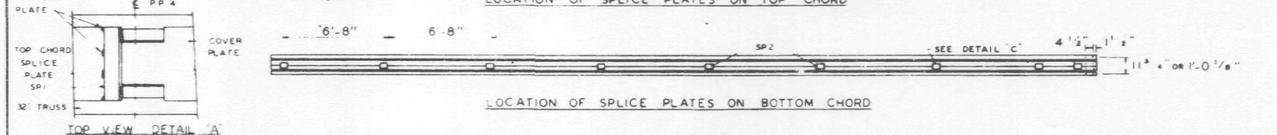
PANEL NO. C1E SIZE 20'-0" x 59'-3"





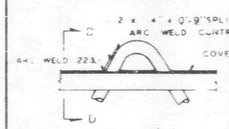
COVER PLATE PLACEMENT

LOCATION OF SPLICE PLATES ON TOP CHORD

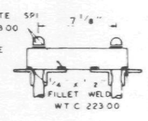


LOCATION OF SPLICE PLATES ON BOTTOM CHORD

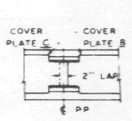
TOP VIEW DETAIL "A"



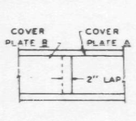
DETAIL "A"



SECTION D-D



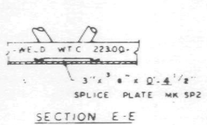
DETAIL "D"



DETAIL "E"

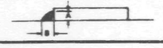
COVER PLATES 29 GA THICK

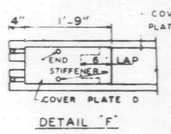
DETAIL "C"



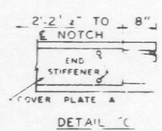
SECTION E-E

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS



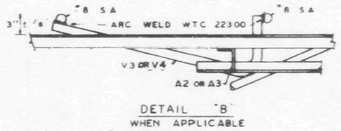


DETAIL "F"

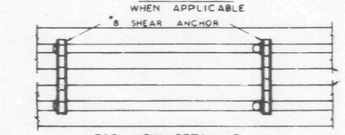


DETAIL "C"

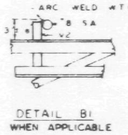
FIELD PUNCH COVER PLATES OVER END STIFFENERS WT C 223.00



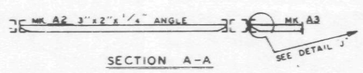
DETAIL "B" WHEN APPLICABLE



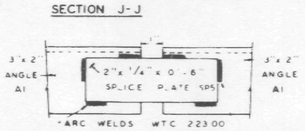
TOP VIEW - DETAIL B



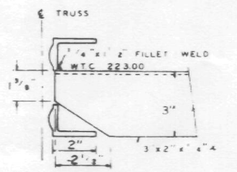
DETAIL B1 WHEN APPLICABLE



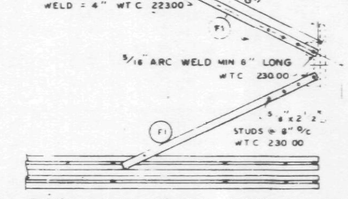
SECTION A-A END SUPPORT ANGLES



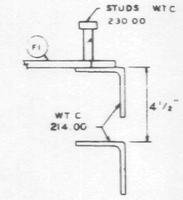
TYPICAL CONNECTION LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

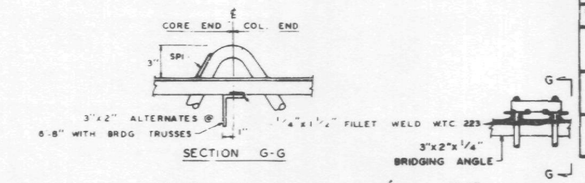


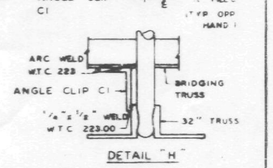
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00



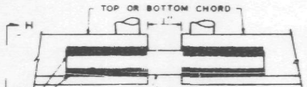
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1E	6	C32TIE - 59'-3"	ST2ME
BRIDGING TRUSSES	T11	1	24 - 19'-11"	BT211
	T12	3	12 - 19'-11"	6 212
3"x2"x1/4" ANGLES		8	3"x2"x1/4"x 19'-...	ST 400
	A2	4	3"x2"x ... x 5'-11 15/16"	ST 480
	A3	2	3"x2"x 5/16" x 5'-11 1/2"	ST 400
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 400
SPLICE PLATES	SP1		2"x 1/4" x 0'-9"	CD201
	SP2	±7	3"x 5/8" x 0'-4 1/2"	CD201
	SP5	5	2"x 1/4"x 0'-9"	CD201
COVER PLATES	A	3	9"x.0135"x 13'-11 1/2"	ST303
	B	6	9"x.0135"x 15'-2"	ST303
	C	3	8"x.0135"x 13'-2 1/2"	ST303
	D	3	9"x.0135"x 1'-9"	ST303
ANGLE CLIPS	C1	21	8"x1 1/2"x 1/4"x 0'-6"	CD201
"8 SHEAR ANCHOR	SA	9	"8 REBAR x 0'-9"	CD201
DAMPING SADDLE	DUS-1	2	3 1/2"x3 1/2"x 3/8"x3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x3'-7 3/8"	ST298
CONNECTION BAR	CB	10	3/4"x 0'-6"	CD201
CLOSURE UNIT	BC	3	2 - 1 1/2"x 1 1/4"x 230 x 6'-4"	BT212 CD204



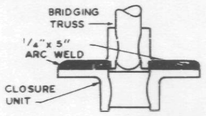


DETAIL "H"

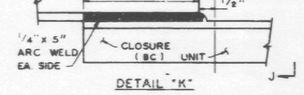


TYPICAL CONNECTION LATERAL CONNECTION OF 24" TRUSSES

SECTION H-H



SECTION J-J



DETAIL "K"

REF DRWG		
7-AB4-3 & 3.1	1-3-68	
7-AB4-15 & 16	3-68	
7-AB4-39-41	1-3-68	
SA 124	10-20-67	
7-AB3-2	1-3-68	
7-AB1-2	2-15-68	
7-AB2-6 & 7	2-15-68	
7-AB4-42	4-1-68	

RECEIVED

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

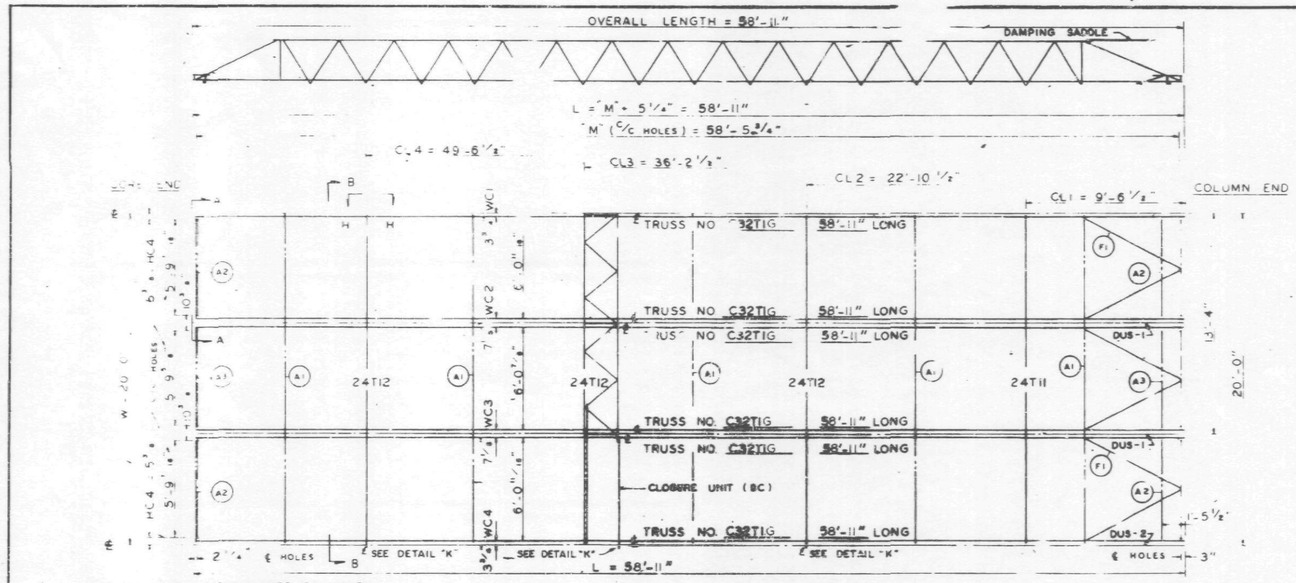
BLDG A FLOORS 10-11 (NORTH & SOUTH)

PANEL C1E 20'-0" x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

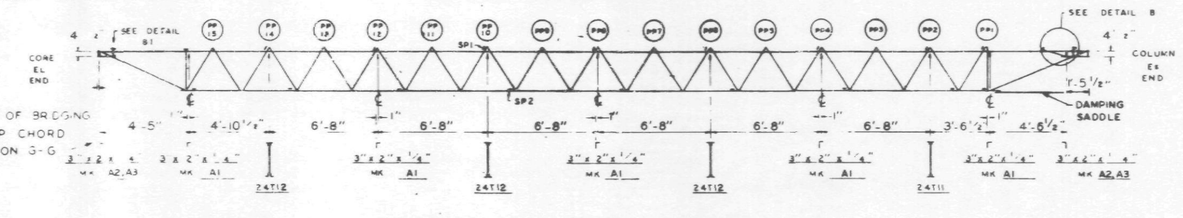
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 4-1-68 PLATE	
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL DATE APRIL 10, 1968	IN CHARGE OF PROD DEV
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C 221	SHEET NO FP C1E

LACLEDE STEEL CO.

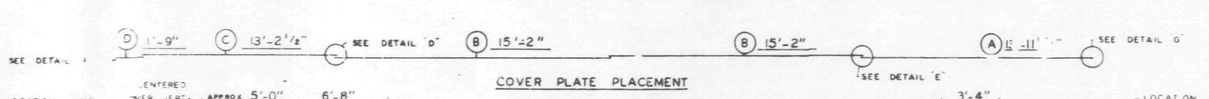


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. C1G SIZE 20'-0" x 58'-11"



ELEVATION OF BRIDGING BELOW TOP CHORD SEE SECTION G-G



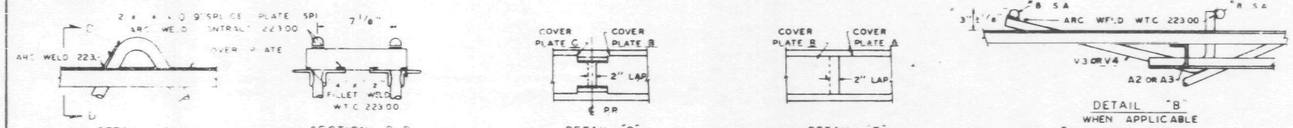
COVER PLATE PLACEMENT

SPLICE PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF SPLICE PLATES ON TOP CHORD

LOCATION OF SPLICE PLATES ON BOTTOM CHORD

TOP VIEW DETAIL A



DETAIL A

SECTION D-D

DETAIL D

DETAIL E

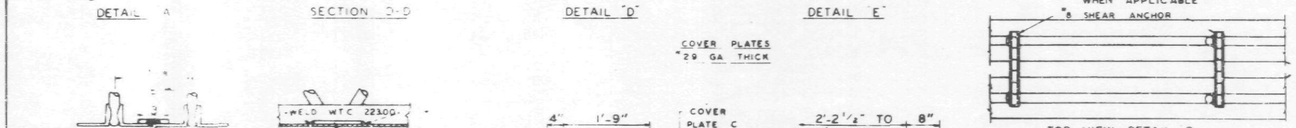
COVER PLATES 29 GA THICK

DETAIL B WHEN APPLICABLE

TOP VIEW - DETAIL B

DETAIL B1 WHEN APPLICABLE

TYPICAL CONNECTION LATERAL CONNECTION OF 3"x2" ANGLES



DETAIL E E

DETAIL F

DETAIL G

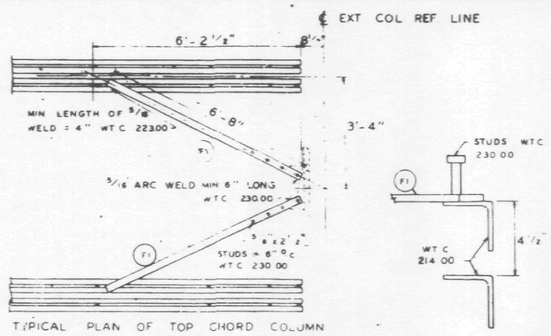
SECTION A-A END SUPPORT ANGLES

DETAIL J END SUPPORT ANGLE ATTACHMENT

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS

A = 1/4"
B = 1/4"

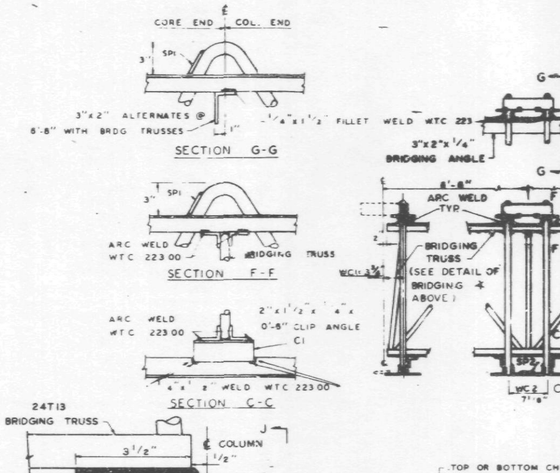
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1G	6	C32TIG - 58'-11"	ST206
BRIDGING TRUSSES	T11	1	24" - 19'-11"	BT211
	T12	3	12 - 19'-11"	BT212
3"x2"x1/4" ANGLES	A	9	3"x2"x1/4" x 19'-11"	ST 400
	A2	4	3"x2"x1/4" x 5'-11 5/8"	ST400
	A3	2	3"x2"x1/4" x 5'-11 1/2"	ST 400
DIAGONAL FLATS	F1	6	1 1/8" x 5/8" x 6'-8"	ST 400
SPLICE PLATES	SP1		2"x1/4"x 0'-9"	CD201
	SP2	27	3"x3/8"x 0'-4 1/2"	CD201
	SP5	5	2"x1/4"x 0'-2"	CD201
COVER PLATES	A	3	9"x.0135"x 13'-11 1/2"	ST303
	B	6	9"x.0135"x 15'-2"	ST303
	C	3	9"x.0135"x 13'-2 1/2"	ST303
	D	3	9"x.0135"x 1'-9"	ST303
ANGLE CLIPS	C1	21	2"x1 1/2"x1/4"x0'-6"	CD201
⌀8 SHEAR ANCHOR	SA	9	⌀8 REBAR x 0'-8"	CD201
DAMPING SADDLE	DUS1	2	3 1/2"x3 1/2"x 3/8"x3'-7 3/8"	ST298
	DUS2	1	3 1/2"x3 1/2"x 3/8"x3'-7 3/8"	ST298
CONNECTION BAR	CB	10	3/4"x8"x 0'-8"	CD201
CLOSURE UNIT	BC	3	2 - 1 1/2"x 1 1/4"x 230 x 6'-4"	BT212



SECTION F-F

SECTION G-G

SECTION C-C

SECTION B-B

DETAIL "K"

SECTION J-J

TYPICAL CONNECTION LATERAL CONNECTION OF 24" TRUSSES

SECTION H-H

DETAIL "H"

REF DRWG		
7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	1-3-68
7-AB4-39-41	1-3-68
SA-124	10-20-67
7-AB3-2	1-3-68
7-AB1-2	2-15-68
7-AB2-6 & 7	2-15-68
7-AB4-42	4-1-68

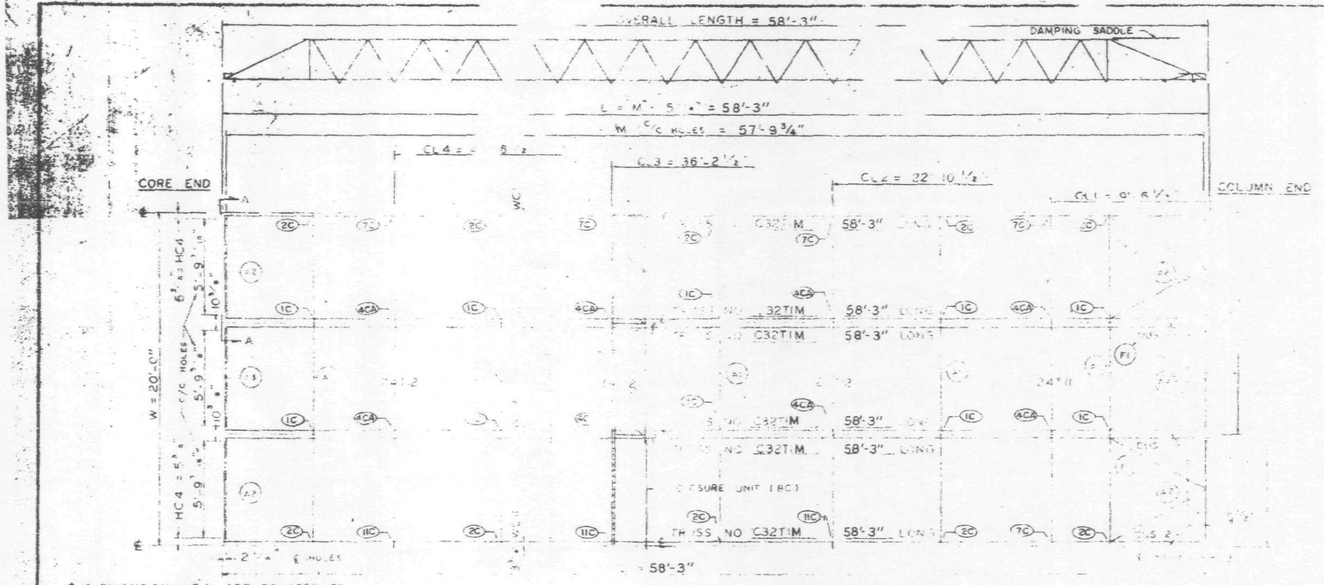
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 39-40 (NORTH & SOUTH)

PANEL C1G - 20'-0" x 58'-11"

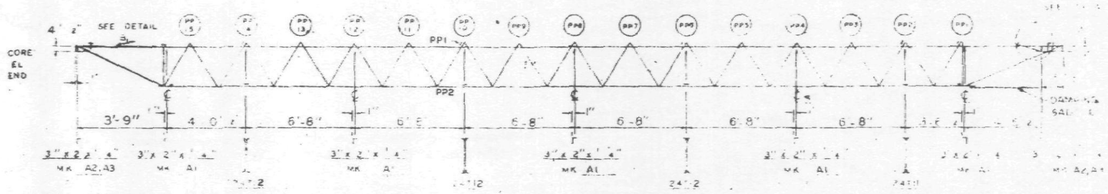
FABRICATION BY LACLEDE STEEL COMPANY

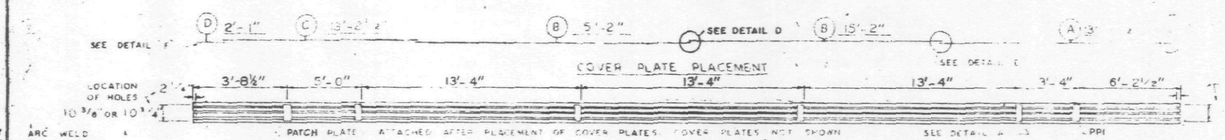
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 4-1-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY B.J. DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R.PAUL DATE APRIL 10, 1968	IN CHARGE OF PROD DEV
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP C1G



℄ & DIMENSION HC4 ARE RELATED TO THE ACTUAL BEARING END OF FLOOR TRUSSES WHICH ARE PARALLEL WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

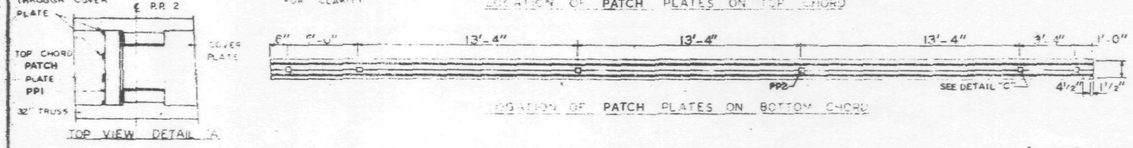
GIRDER NO. C.M. SIZE 20'-0" x 58'-3"





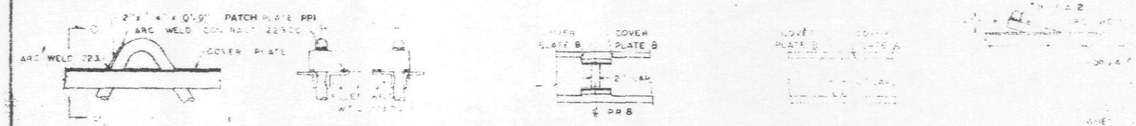
* PATCH PLATE ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

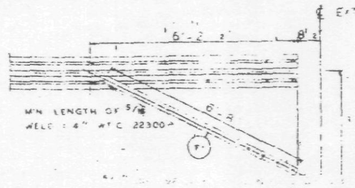


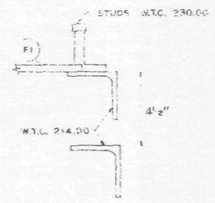
TOP VIEW DETAIL A

LOCATION OF PATCH PLATES ON BOTTOM CHORD



NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES AS E.G.L.A.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ≤ 1" FILLET THROUGH FILLET.





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PIECE

MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T1M	4	C32T1M 58'-3"	M1
BRIDGING TRUSSES	T1	1	24T1 [illegible]	[illegible]
		3	24T1 [illegible]	[illegible]
				ST [illegible]
ANGLE			4 x 5"	ST 403
				403
			[illegible]	ST 402
	PP1	18	[illegible] 9"	ST 400
	PP2		[illegible]	ST 400
			[illegible]	ST 403
			9" x .0135" x 15'-2"	ST 303
			[illegible] x .1135" x 3'-2"	ST 908
			.0135" x 2'-1"	ST 303
			2 x 3½" x 3/4" x 0'-6"	ST 400
	SA2	9	3" REBAR x 0'-9"	ST 400
ANGLE			3½" x 3½" x 3/8" x 3.8 7/8"	ST 298
ANGLE			3½" x 3½" x 3/8" x 3.8 7/8"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - L 3½" x 3½" x 1¼" x 230 x 6'-6½"	ST 212 CD 204
CONNECTION PLATES	P1	5	3½" x 3/8" x 0'-8½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, (A), (B), INDICATE CONNECTION DETAILS SHOWN ON SHEET CT 201, CT 202 OR CT 204.

NO.	DATE	REVISION	BY

REF DWGS

T-AB4-3,3.1	1-3-69
T-AB4-15 & 16	7-22-68
T-AB4-39 & 41	7-22-68
SA-12-4	10-11-68
T-AB4-2	1-3-69
T-AB4-2	7-22-68
T-ARP-5 & 7	7-22-68
AB4-42	10-15-68

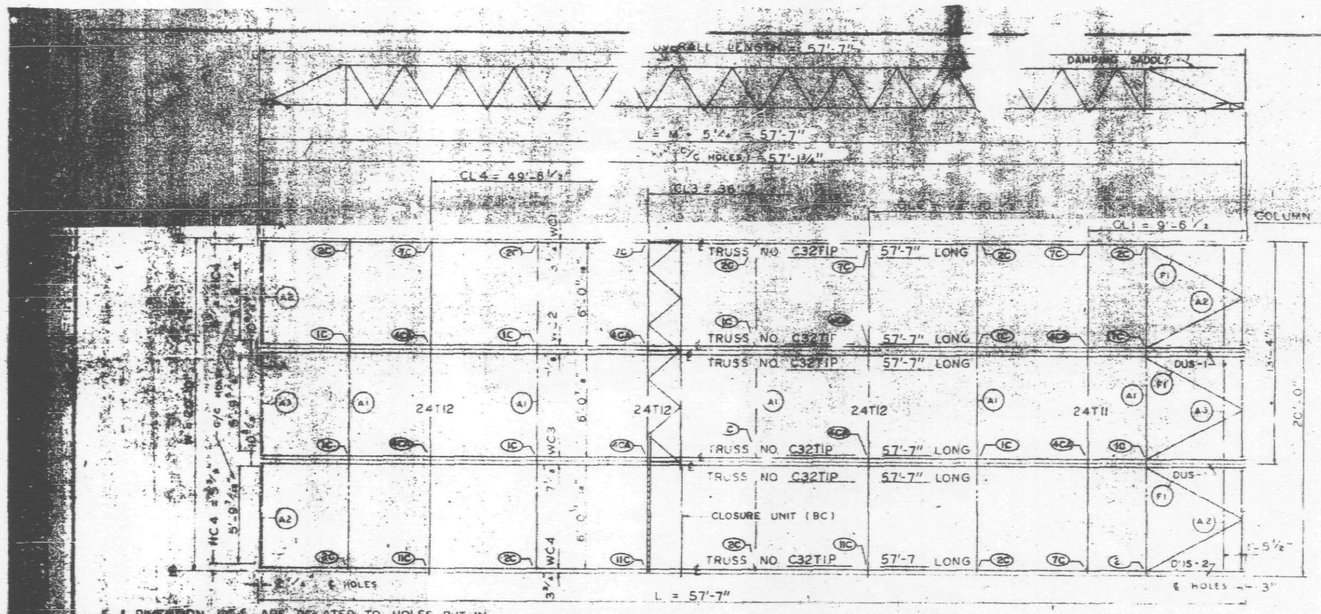
[illegible] WORK AUTHORITY

72-73 (N)

PIER CIM : 20'-0" & 58'-3"

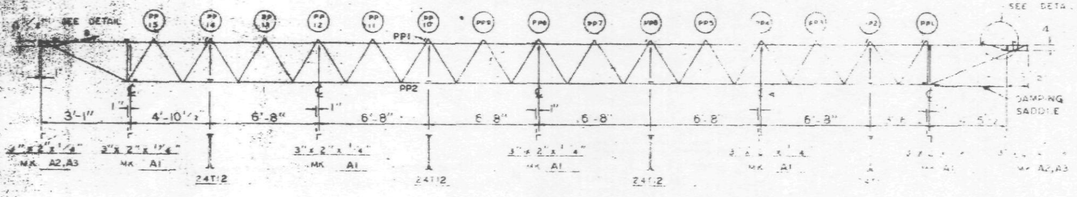
[illegible] COMPANY

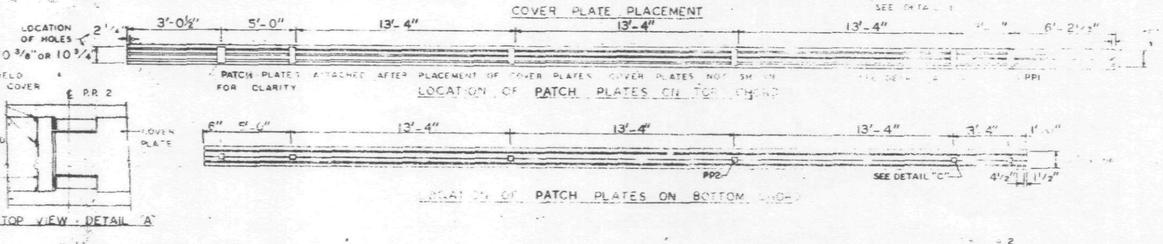
[illegible] FOR P.O.N.Y.A.	DATE 11/7/68	SHOP DRAWING NO. T-AB4-3 7-22-68 PLATE	
[illegible] FABRICATOR	DATE	DRAWN BY [illegible] DATE 10-24-68	
		CHECKED BY T.M. CHURA IN CHARGE OF PROD. DEV. DATE 10-24-68	
[illegible] CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FB TM

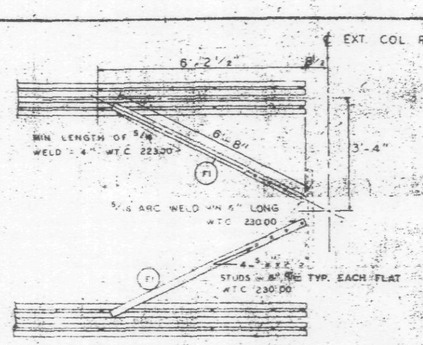


℄ & DIMENSION NC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

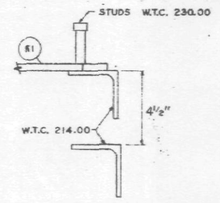
PANEL NO CIP SIZE 20'-0" x 57'-7"







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL					
MATERIAL	MK	PCS			REF. DRWG.
FLOOR TRUSSES	TIP	6		TIP 57'-7"	
BRIDGING TRUSSES	TII			24TII	
	TI2			24TII	
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 11"		ST 400
	A2	4	3" x [illegible]		
	A3	2	[illegible]		
DIAGONAL FLATS	F1	5	[illegible]		
PATCH PLATES	F	18	[illegible]		ST [illegible]
	PP2	18	2" x [illegible]		
COVER PLATES	A	3	9" x .0135" x 13'-1"		[illegible]
	B	5	9" x .0135" x 15'-8"		ST 300
	C	3	[illegible] x .0135" x 13'-2"		ST 300
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 6"		ST 400
3/8 SHEAR ANCHOR	SA2	9	3/8 SHEAR @ 6'-0"		ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x [illegible]		
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x [illegible]		
CONNECTION BAR	CB1	4	1" x 1'-3"		ST 300
CLOSURE UNIT	BC	3	2" x 1 1/2" x [illegible]		ST 300
			230 x 6'-6 1/2"		ST 300
CONNECTION PLATES	P1	5	3/16" x 8" x 0'-6"		ST 400
	P2	4	4 1/2" x .38" x 0'-9"		ST 400
	P3	1	4 1/2" x .38" x 1'-0"		ST 400

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

[illegible]	1-3-68
[illegible] 14, 15 & 16	7-22-68
[illegible] 38 & 41	7-22-68
[illegible] 4	10-11-68
[illegible] 2	1-3-68
[illegible]	7-22-68
[illegible]	7-22-68
[illegible]	10-15-68

74 (N)

P 57'-7"

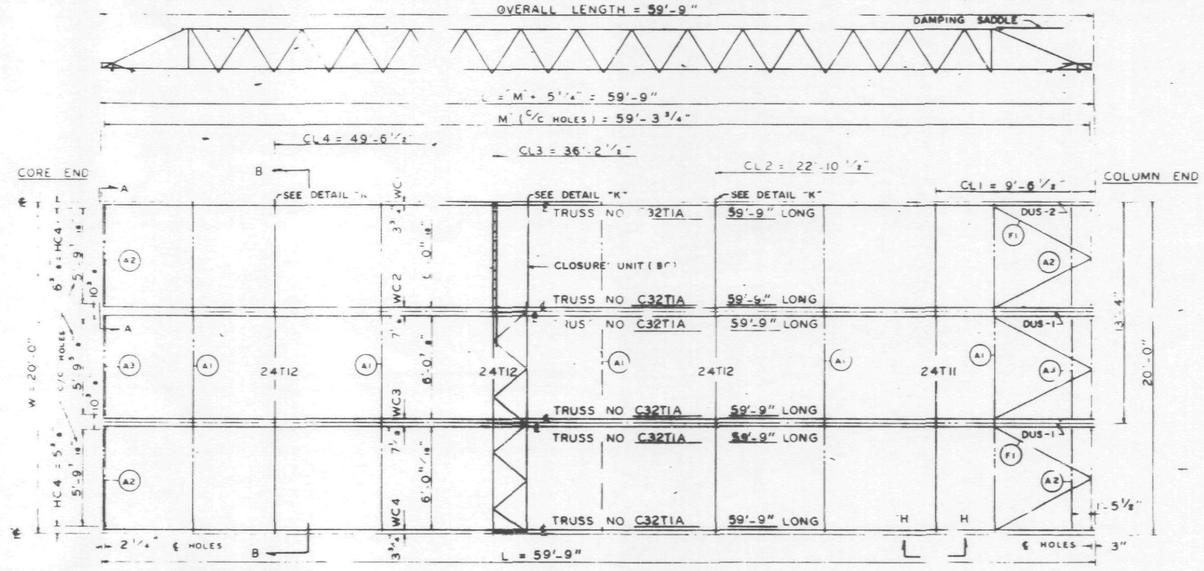
11/7/68

[illegible] 4-68

[illegible] Y T.M. CHUPA

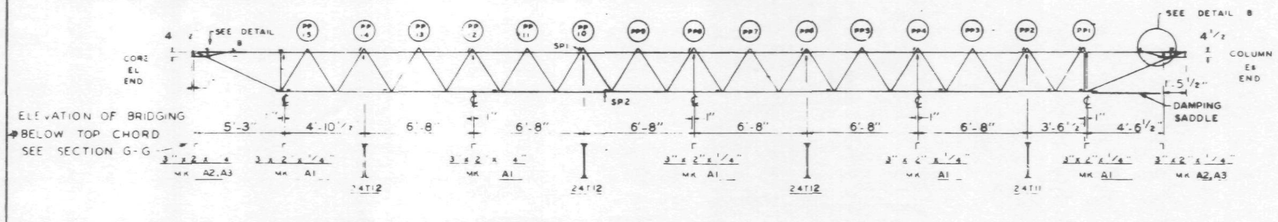
IN CHARGE OF DESIGN DEV.

SHEET NO. FF WP



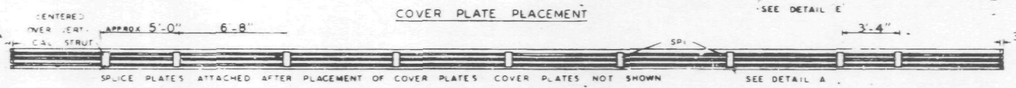
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. CR1A SIZE 20'-0" x 59'-9"



ELEVATION OF BRIDGING BELOW TOP CHORD SEE SECTION G-G

COVER PLATE PLACEMENT

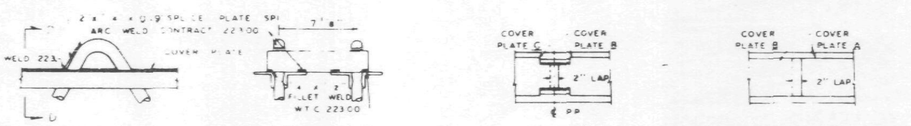


SPLICE PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

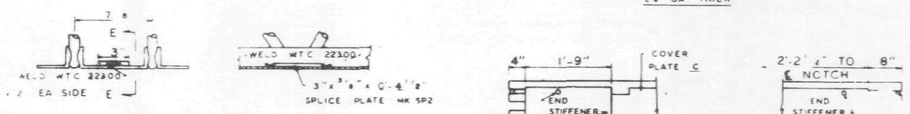
LOCATION OF SPLICE PLATES ON TOP CHORD

LOCATION OF SPLICE PLATES ON BOTTOM CHORD

TOP VIEW DETAIL A

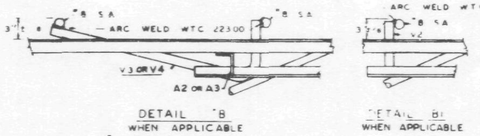


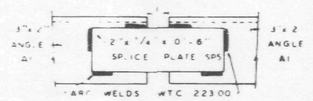
COVER PLATES 20 GA THICK

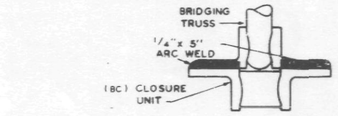


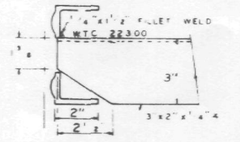
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1' FILLET WELDS

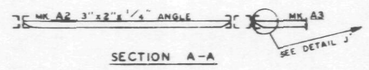
FIELD PUNCH COVER PLATES OVER END STIFFENERS, WTC 223.00

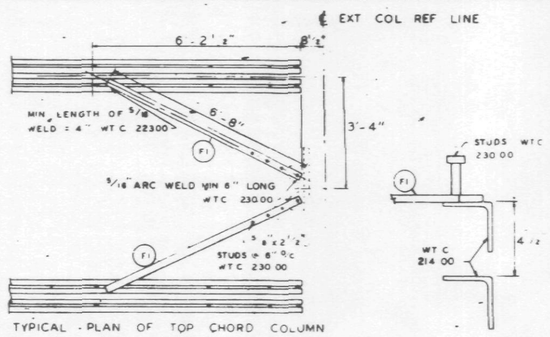








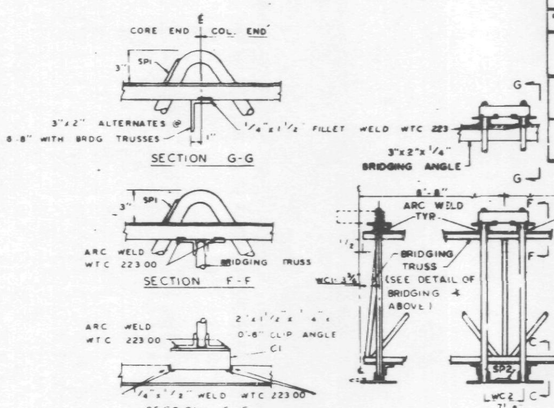


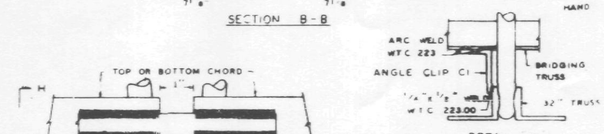


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T1A	6	C32T1A - 59'-9"	ST201A
BRIDGING TRUSSES	T11	1	? - 19'-11"	BT211
	T12	3	- 12 - 19'-11"	BT212
		8	3"x2"x1/4"- 18'-11"	ST 400
3" x 2" x 1/4" ANGLE	A2	4	3"x2"x ... x 5'-11 1/2"	ST 400
	A3	2	3"x2"x1/4"x 5'-11 1/2"	ST 400
DIAGONAL FLATS	F1	6	1 1/2"x 3/8" x 6'-8"	ST 400
SPLICE PLATES	SP1		2"x 1/4" x 0'-9"	CD20
	SP2	27	3" x 3/8" x 0'-4 1/2"	CD20
	SP5	5	2"x 1/4"x 0'-6"	CD20
COVER PLATES	A	3	9"x.0135"x 13'-11 1/2"	ST303
	B	6	9"x.0135"x 15'-2	ST303
	C	3	9"x.0135"x 13'-2 1/2"	ST303
	D	3	9"x.0135"x 1'-9"	ST303
ANGLE CLIPS	C1	21	2"x1 1/2"x 1/4"x 0'-6"	CD201
⌀ 8 SHEAR ANCHOR	SA	12	⌀ 8 REBAR x 0'-9"	CD201
DAMPING SADDLE	DUS-1	2	3 1/2"x 3 1/2"x 3/8"x 3'-7 3/8"	ST298
	DUS-2	1	3 1/2"x 3 1/2"x 3/8"x 3'-7 3/8"	ST298
CONNECTION BAR	CB	10	3/4" x 0'-8"	CD201
CLOSURE UNIT	BC	3	2 x 1 1/2" x 1 1/4" x .230 x 6'-4"	BT212 CD204





REF DRWG		
7-AB4 3 & 3	3-6B	
7-AB4-15 & 6	3-6B	
7-AB4 39-41	3-6B	
SA 124	C-20-68	
7-AB3 2	3-6B	
7-AB1 2	2-15-68	
7-AB2 6 & 7	2-15-68	
7-AB4-42	4-1-68	

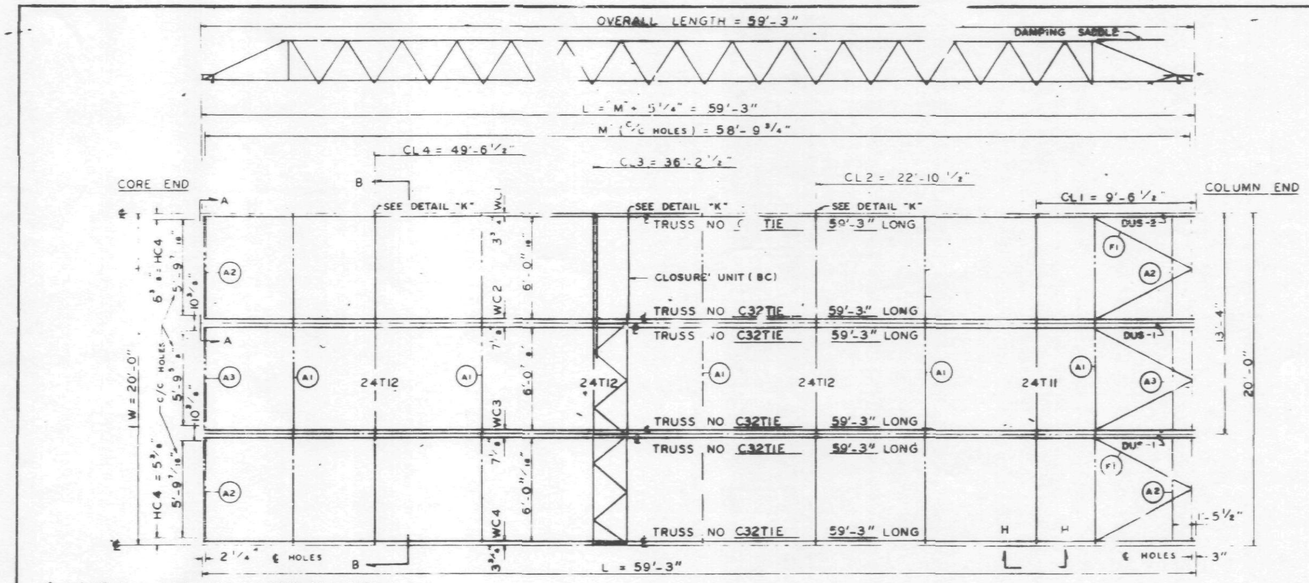
VOID

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 12-24, 26-38 (NORTH & SOUTH) 42-58, 60-66
68-69 (NORTH) PANEL CR1A - 20'-0" x 59'-9

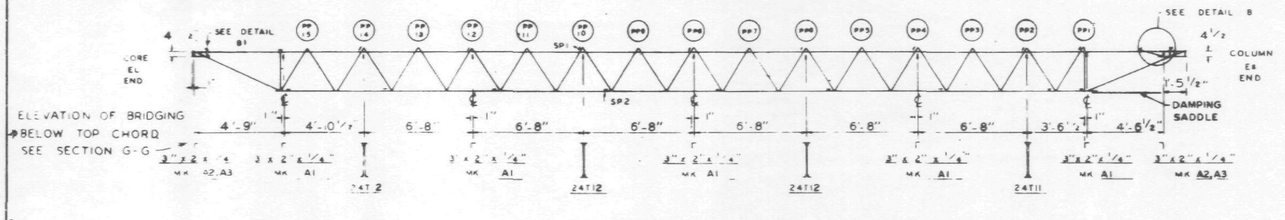
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-7 4-1-68	PLATE
APPROVED FOR FABRICATION BY ... FOR P.O.N.Y.A.	DATE	DRAWN BY	
		DATE APR. 10, 1968	
APPROVED FABRICATION BY ... FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL	IN CHARGE OF PROD. DEV.
		DATE APR. 10, 1968	
DETAILED BY R.E. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-CR1A

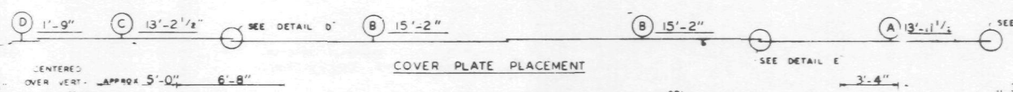


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

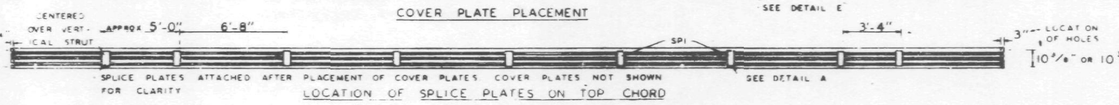
PANEL NO. CRIE SIZE 20'-0" x 59'-3"



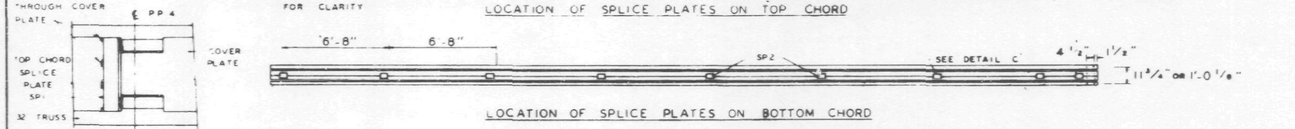
ELEVATION OF BRIDGING BELOW TOP CHORD SEE SECTION G-G



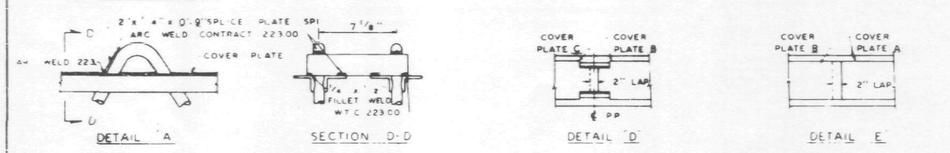
COVER PLATE PLACEMENT



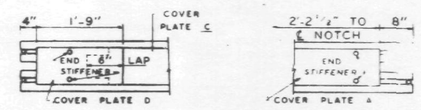
LOCATION OF SPLICE PLATES ON TOP CHORD



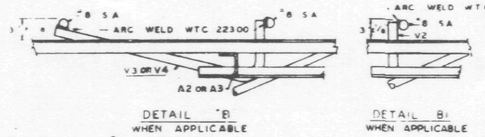
LOCATION OF SPLICE PLATES ON BOTTOM CHORD



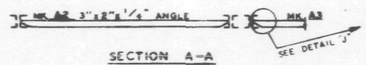
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS



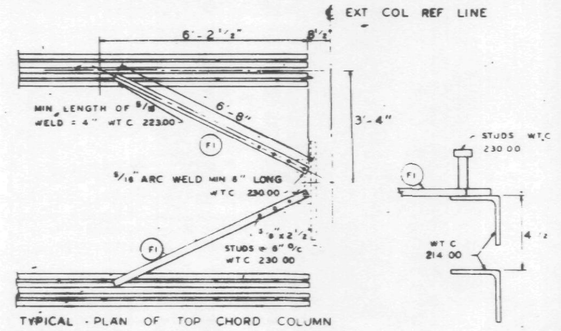
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00



COVER PLATES 7/8 GA THICK



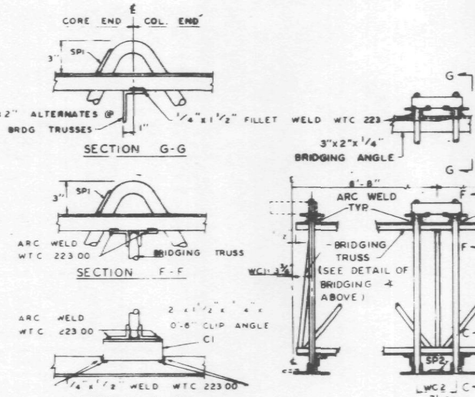
SECTION A-A
END SUPPORT ANGLES

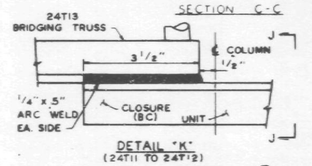


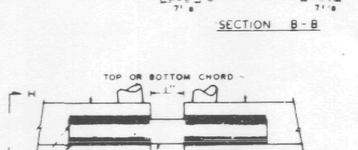
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00

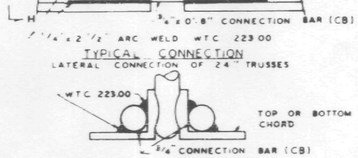
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

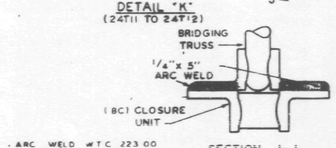
REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIE	6	C32TIE - 59'-3"	ST206
BRIDGING TRUSSES	T11	1	24" [illegible] 19'-11"	BT211
	T12	3	24" [illegible] 19'-11"	BT212
3 x 2" x 1/4" ANGLE	[illegible]	3	3"x2"x1/4" x 19'-11"	ST400
	A2	4	3"x2"x1/4" x 5'-11 5/16"	ST400
	A3	2	3"x2"x1/4" x 5'-11 7/8"	ST400
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST400
SPLICE PLATES	SP1	2	2" x 1/4" x 0'-9"	CD201
	SP2	2	3" x 3/8" x 0'-4 1/2"	CD201
	SP3	5	2" x 1/4" x 0'-6"	CD201
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST303
	B	6	9" x .0135" x 15'-2"	ST303
	C	3	9" x .0135" x 13'-2 1/2"	ST303
	D	3	9" x .0135" x 1'-9"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	CD201
3/8" SHEAR ANCHOR	SA	9	3/8" REBAR x 0'-9"	CD201
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-7 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-7 7/8"	ST298
CONNECTION BAR	CB	10	3/4" x 0'-6"	CD201
CLOSURE UNIT	BC	3	2" x 1 1/2" x 1 1/4" x 230 x 6'-4"	BT212 CD204

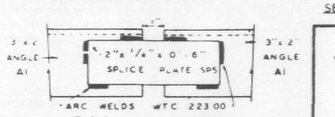


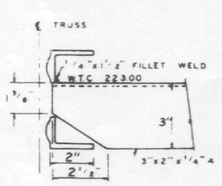












REF DRWG		
7-AB4 3 & 31	1-3-68
7-AB4 15 & 16	1-3-68
7-AB4 39-41	1-3-68
SA 124	10-20-67
7-AB3-2	1-3-68
7-AB1-2	2-15-68
7-AB2-6 & 7	2-15-68
7-AB4-42	4-1-68

VOID

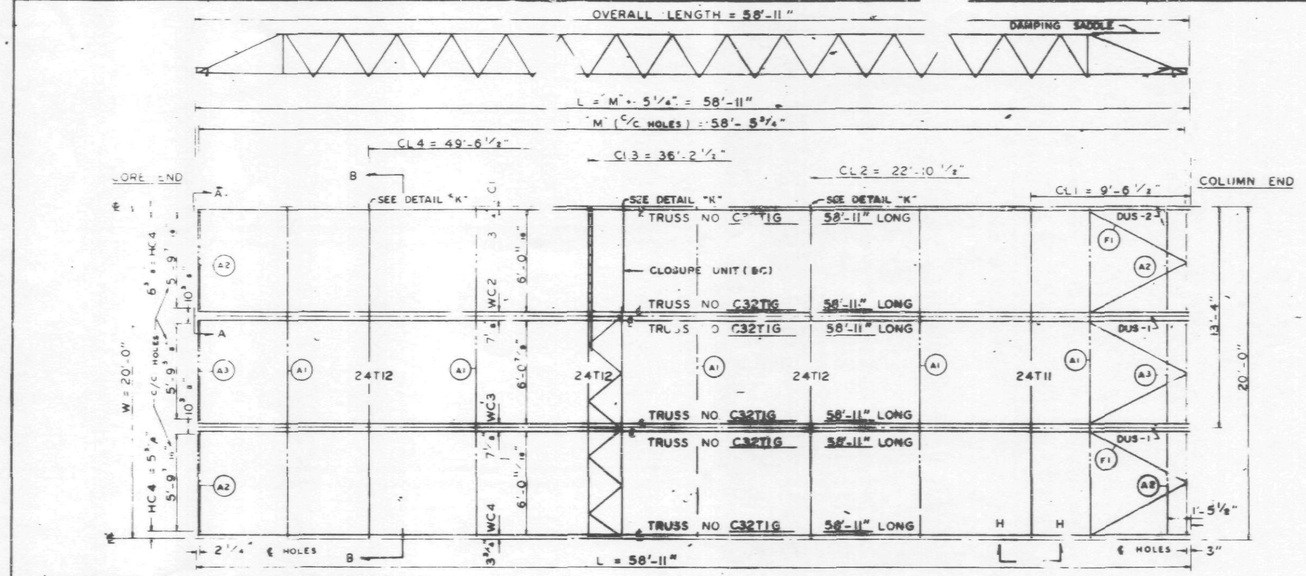
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-11 (SOUTH)

PANEL CRIE - 20'-0" x 59'-3

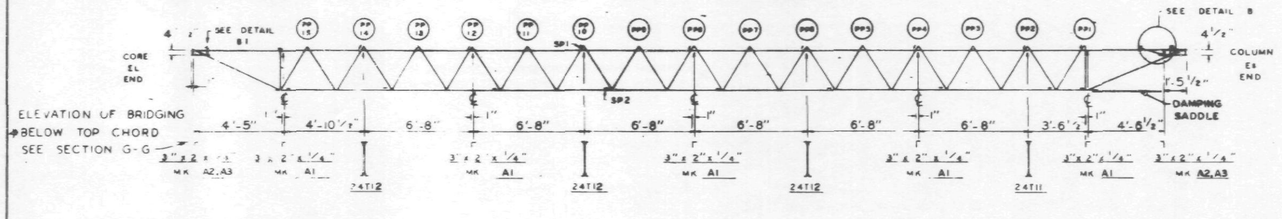
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 4-1-68	PLATE
APPROVED FOR FABRICATION BY - FOR P.O.N.Y.A.	DATE	DRAWN BY	
		DATE APR. 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.R. PAUL DATE APR. 10, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP-CRIE



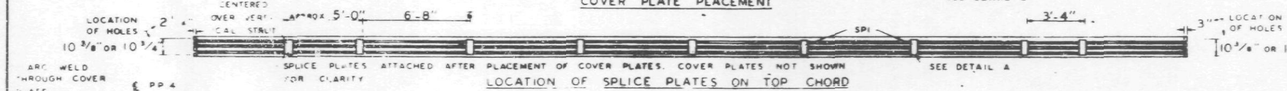
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. CRIG SIZE 20'-0" x 58'-11"



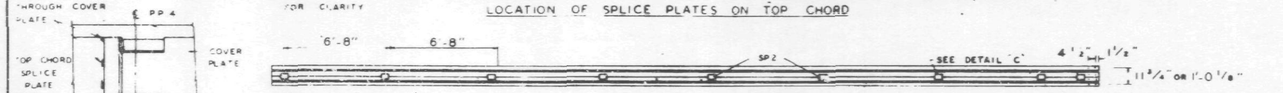
ELEVATION OF BRIDGING BELOW TOP CHORD SEE SECTION G-G

COVER PLATE PLACEMENT

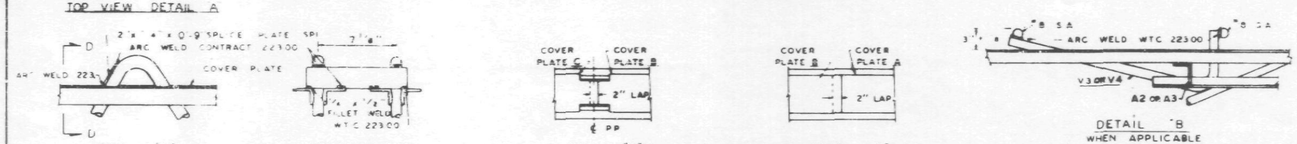


SPLICE PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF SPLICE PLATES ON TOP CHORD



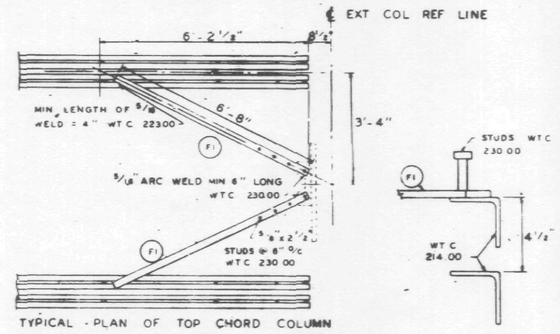
LOCATION OF SPLICE PLATES ON BOTTOM CHORD



NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS A = 1/4" B = 1/4"

COVER PLATES 29 GA THICK

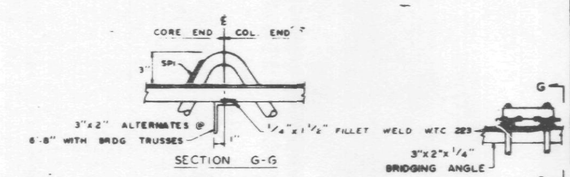
FIELD PUNCH COVER PLATES OVER END STIFFENER OR WT C 223.00

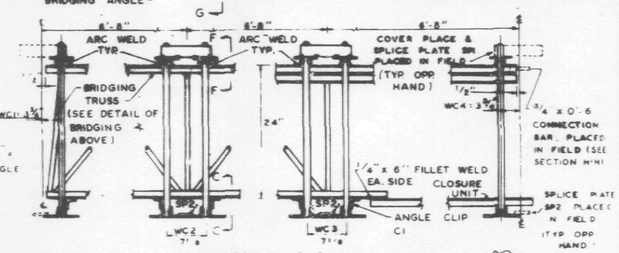


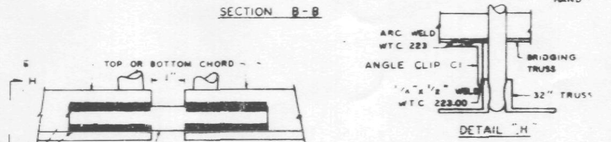
TYPICAL - PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WT C 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1G	6	C32T1G - 58'-11"	ST201G
BRIDGING TRUSSES	T11	1	24T1 - 19'-11"	BT211
	T12	3	24T2 - 19'-11"	BT212
3"x2"x1/4" ANGLE	A1		3"x2"x1/4"x 19'-11"	ST 400
	A2	4	3"x2"x1/4" 3'-11 1/8"	ST 400
	A3	2	3"x2"x1/4"x 3'-11 1/8"	ST 400
DIAGONAL FLATS	F1	6	1 1/2"x 5/8"x 6'-8"	ST 400
SPLICE PLATES	SP1	27	7"x 1/4"x 0'-9"	CD 201
	SP2	27	3"x 5/8"x 0'-4 1/2"	CD 201
	SPB	5	2"x 1/4"x 0'-6"	CD 201
COVER PLATES	A	3	9"x.0135"x 13'-11 1/2"	ST 303
	B	6	9"x.0135"x 15'-2"	ST 303
	C	3	9"x.0135"x 13'-2 1/2"	ST 303
	D	3	9"x.0135"x 1'-9"	ST 303
ANGLE CLIPS	C1	21	2"x1 1/2"x 1/4"x 0'-6"	CD 201
5/8" ℄ SHEAR ANCHOR	SA	0	5/8" ℄ REBAR x 0'-9"	CD 201
DAMPING SADDLE	DUS-1	2	3 1/2"x3 1/2"x 5/8"x 3'-7 5/8"	ST 298
	DUS-2	1	3 1/2"x3 1/2"x 5/8"x 3'-7 5/8"	ST 298
CONNECTION BAR	CB	10	5/8"℄ x 0'-8"	CD 201
CLOSURE UNIT	BC	3	2 3/4"x 1 1/2"x 1 1/4"x .230 x 6'-4"	BT 212 CD 204







REF DRWG		
7-AB4-3 & 31		1-3-68
7-AB4-15 & 16		1-3-68
7-AB4-39-41		1-3-68
SA-124		10-20-67
7-AB3-2		1-3-68
7-AB1-2		2-15-68
7-AB2-6 & 7		2-15-68
7-AB4-42		4-1-68

VOID

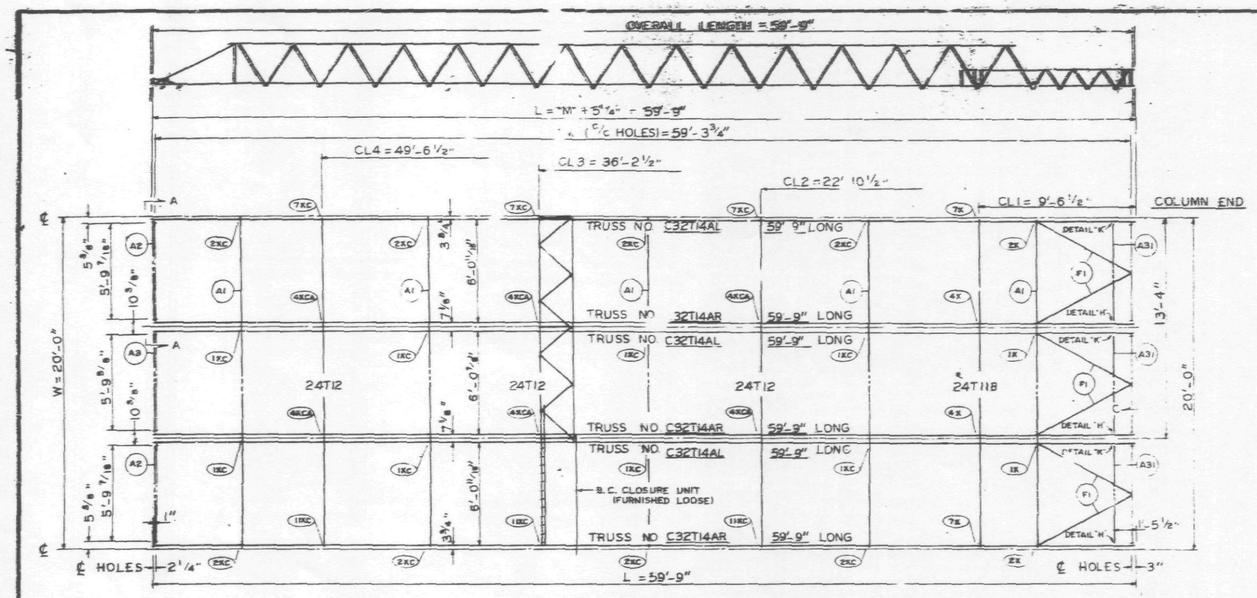
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-11, 39 (NORTH) 39-40 (SOUTH)

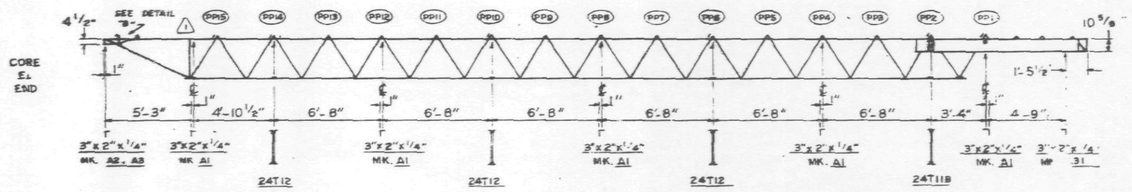
PANEL CRIG - 20'-0" x 58'-11"

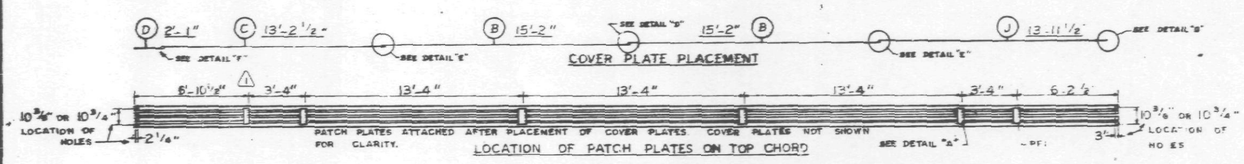
FABRICATION BY LACLEDE STEEL COMPANY

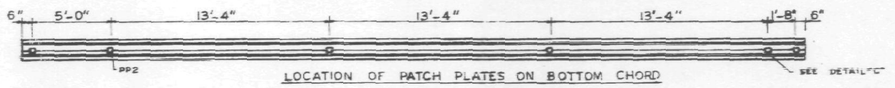
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-7 4-1-68 PLATE	
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A	DATE ____	DRAWN BY [illegible] DATE APR. 10, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE ____	CHECKED BY J.R.PAUL DATE APR. 10, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO DETAILED BY A.T. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-CRIG

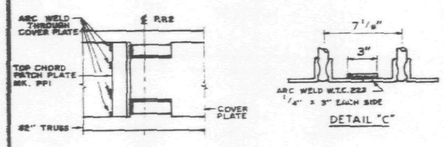


PANEL NO. C2A SIZE 20' x 59'-9"



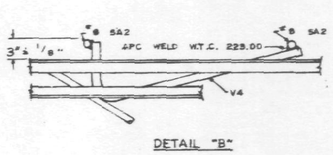




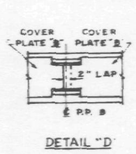


TOP VIEW - DETAIL "A"

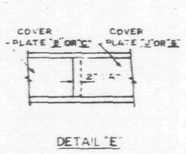
DETAIL "C"



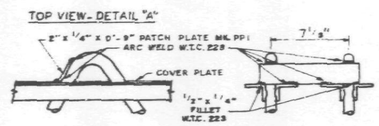
DETAIL "B"



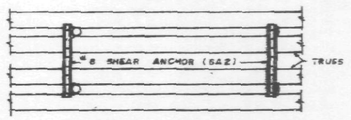
DETAIL "D"



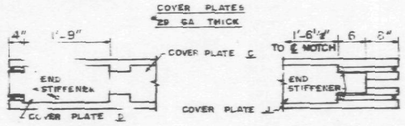
DETAIL "E"



DETAIL "A" SECTION B-B

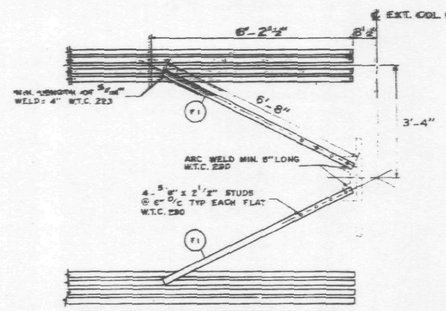


TOP VIEW DETAIL "B"

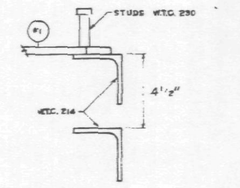


DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



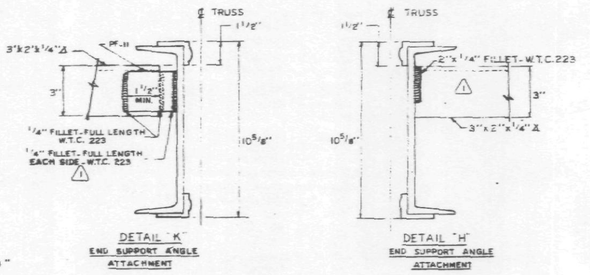
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

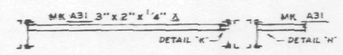


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

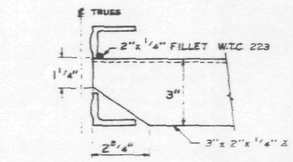
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	[illegible]	3	C32T14AL x 59'-9"	ST 214AL
	[illegible]	3	C32T14AR x 59'-9"	ST 214 AL
BRIDGING TRUSSES	T11B	1	24T11B x [illegible]"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	1/2" D 6'-8 1/2" TUBE	ST 212
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-[illegible]"	ST 403
	A3	1	3" x 2" x 1/4" x [illegible]"	ST 403
	A31	3	3" x [illegible] x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	[illegible]'-2" x 5/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/16" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x .25" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (K)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

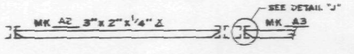




SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	GDC

REF. DRWG.

7-AB3-28	10-4-68
7-AC4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

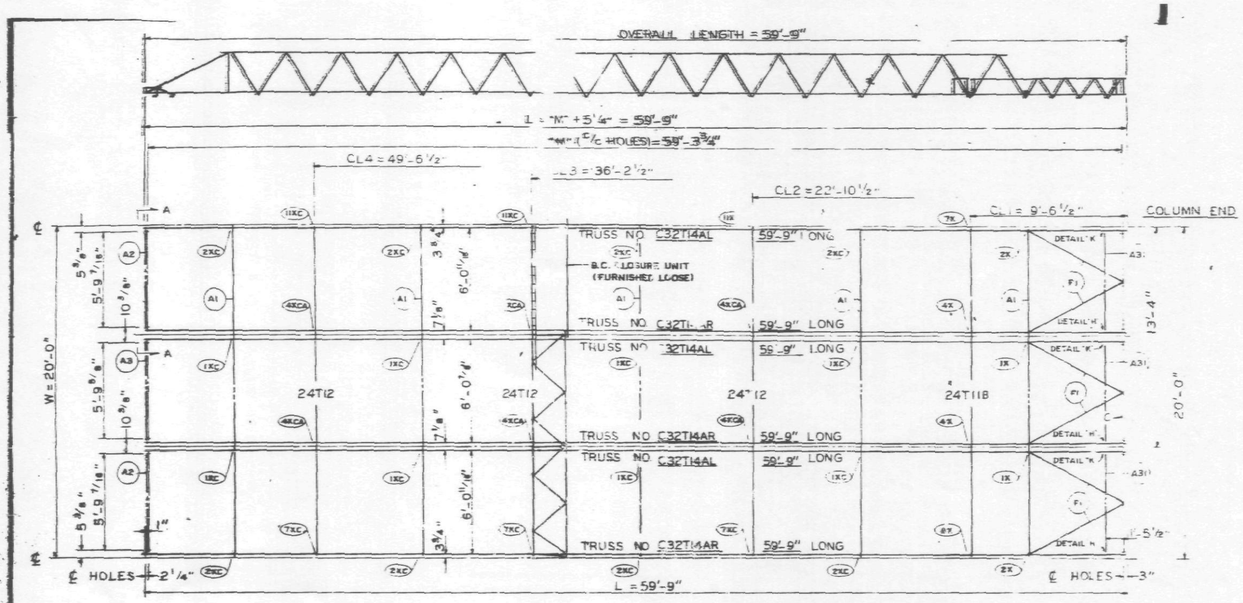
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH) (1)

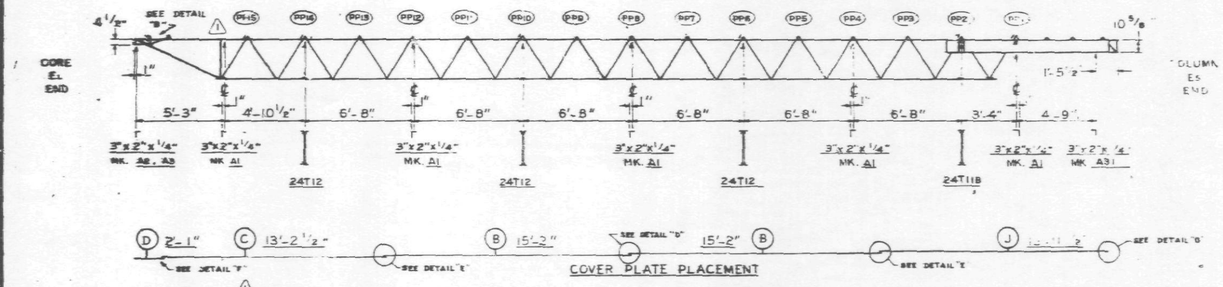
PANEL C2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

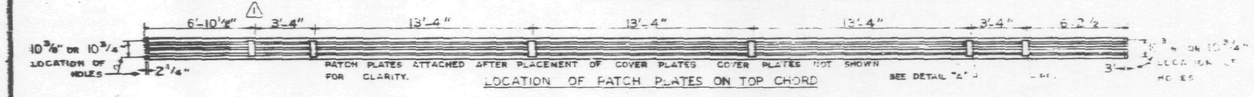
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-28	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 2/26/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBB DATE DEC. 5, 1968	IN CHARGE OF PROD. DEN
DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP C2A



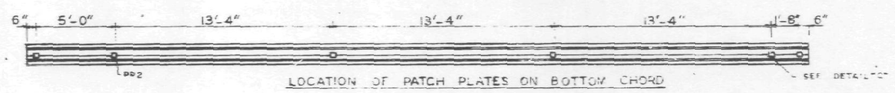
PANEL NO. CR2A SIZE 20' x 59'-9"



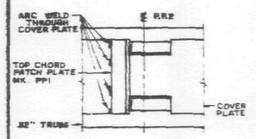
COVER PLATE PLACEMENT



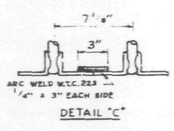
LOCATION OF PATCH PLATES ON TOP CHORD



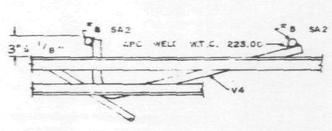
LOCATION OF PATCH PLATES ON BOTTOM CHORD



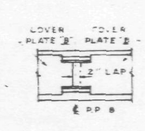
TOP VIEW - DETAIL "A"



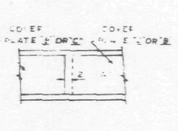
DETAIL "C"



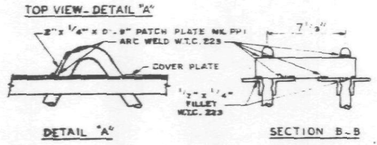
DETAIL "B"



DETAIL "D"

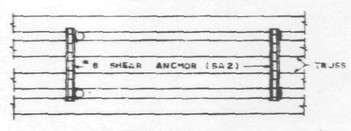


DETAIL E

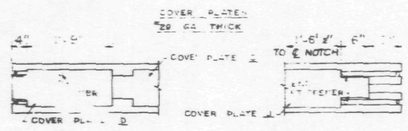


DETAIL "A"

SECTION B-B



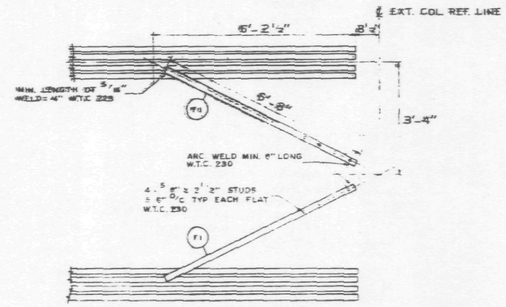
TOP VIEW DETAIL "B"



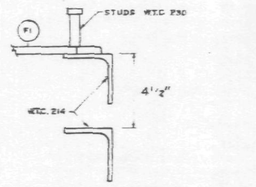
DETAIL "F"

DETAIL G

FIELD PUNCH COVER PLATES OVER MIN. STIFFENERS W.T.C. 223.00



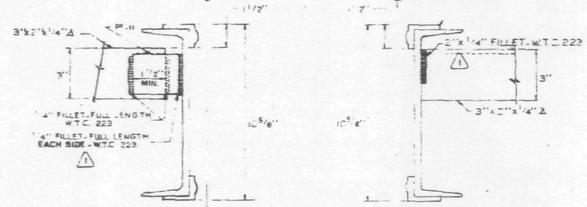
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

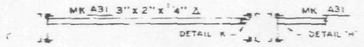
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1AL	3	C32T14AL x 59'-9"	ST 214AL
	T1AR	3	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-1"	216
	T12	3	24T12 x 19'-1"	212
CLOSURE UNIT	BC	3	1 1/4" □ 6-6 1/2" TUBE	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4"x 19'-1"	ST 40
	A2	2	3" 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"	ST 410
CLOSURE PLATES	PF11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	16	2" x 1/4" x 0'-9"	ST 400
	PP2	16	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	8" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x .25" x 0'-6"	ST 400
*8 SHEAR ANCHOR	SA2	6	*8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 5/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-8"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS i.e. (D)
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 52 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

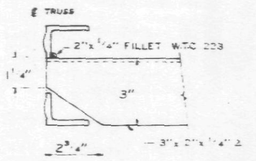


DETAIL K
END SUPPORT ANGLE ATTACHMENT

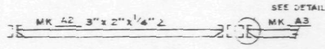
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



DETAIL J
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	EDIC

REF. DRWG.

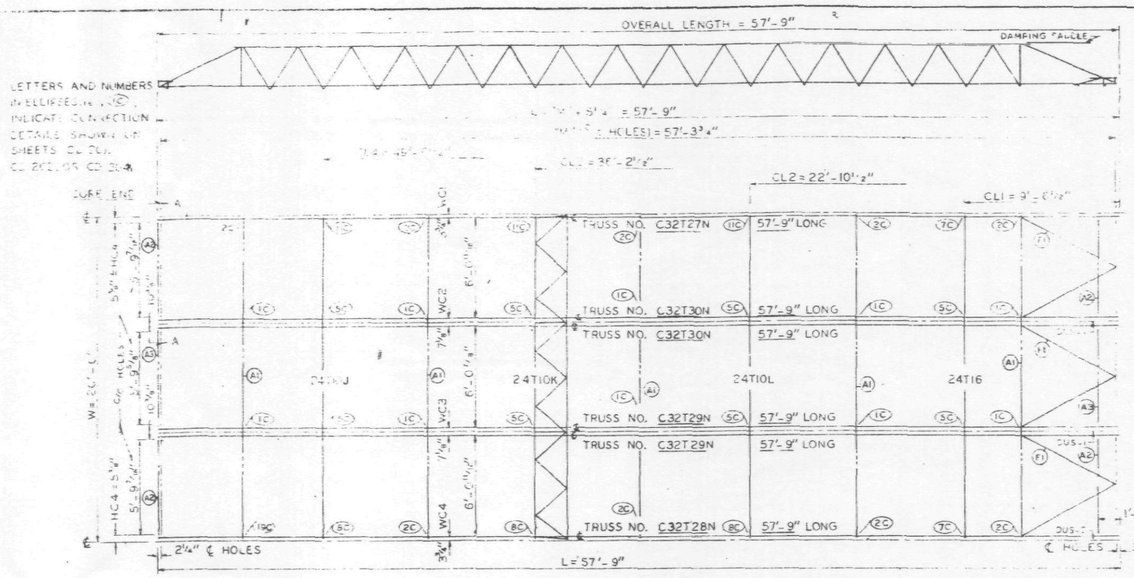
7-AB3-29	10-4-68
7-AB4-26	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL CR2A - 20' x 59'-9"

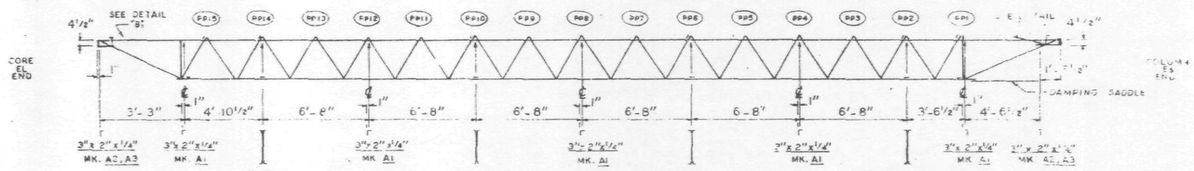
FABRICATION BY LACLEDE STEEL COMPANY

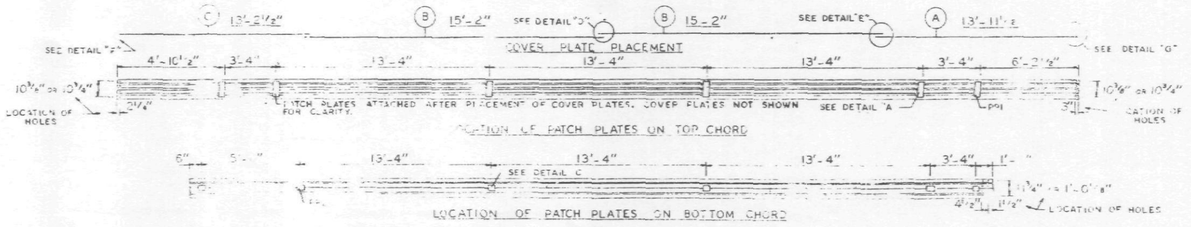
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-29	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 2/28/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.N. CHURA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEP.
DETAILED BY [illegible]		FABRICATION CONT NO W.T.C. 22;	SHEET NO FP CR2A

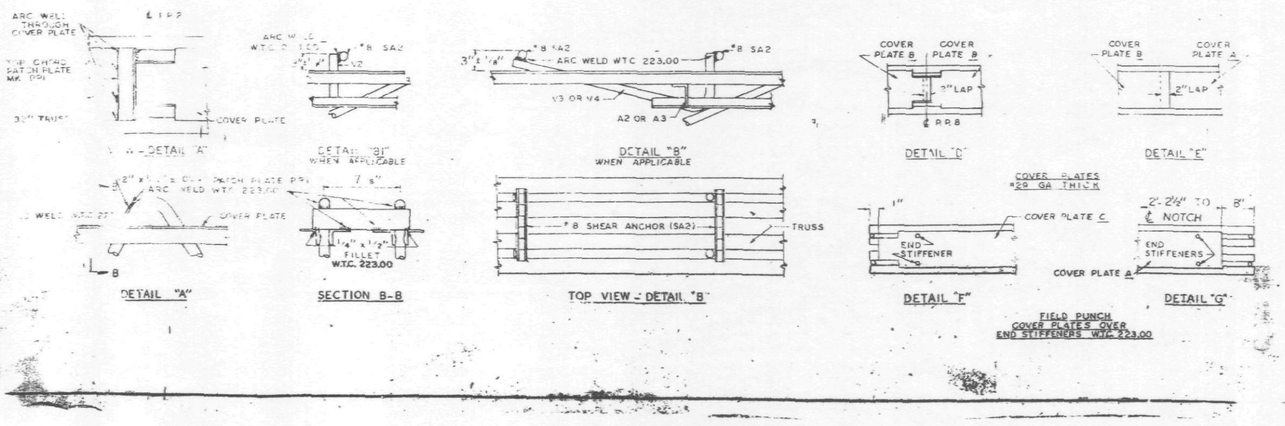


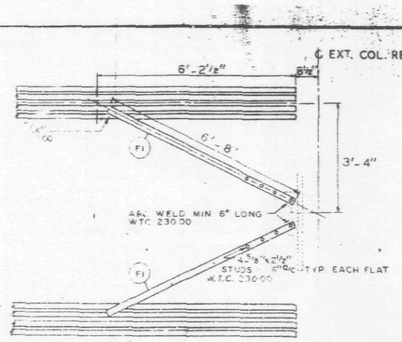
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D3N SIZE 20' x 57'-9"

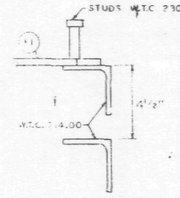








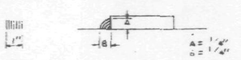
TYPICAL PLAN AT TOP CHORD @ COLUMN END DIAGONAL TRUSS BRACES PLACED OVER PATCH PL WITC 223.00

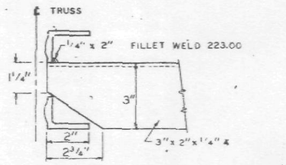


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T27N	1	C32T27N - 57'-9"	ST 227N
	T28N	1	C32T28N - 57'-9"	ST 228N
	T29N	2	C32T29N - 57'-9"	ST 229N
	T30N	2	C32T30N - 57'-9"	ST 230N
BRIDGING TRUSSES	T10J	1	24T10J - 19'-11"	ST 210J
	T10K	1	24T10K - 19'-11"	ST 210K
	T10L	1	24T10L - 19'-11"	ST 210L
	T16	1	24T16 - 19'-11"	ST 216
3"x 2"x1/4" ANGLE	A1	5	3"x 2"x 1'-4"x 19'-11"	ST 403
	A2	4	3"x 2"x 2'-4"x 5'-11 5/16"	ST 403
	A3	2	3"x 2"x 3'-4"x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 5 7/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	15	3" x 7/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	C1	24	2"x 2 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	8	# 8 REBAR x 0'-9"	ST 401
AMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/4" x 3'-6"	ST 628
	DUS-2	1	3 1/2" x 3 1/2" x 3/4" x 3'-6"	ST 628
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	8	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 2 3/8" x 8'-1/2"	ST 400
	P2	1	4 1/2" x .391" x 0'-6"	ST 400
	P3	1	4 1/2" x .391" x 1'-0"	ST 400
	P4	3	6 1/2" x 1 1/2" x 0'-6"	ST 400
	P6	1	4 1/2" x .391" x 0'-6"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





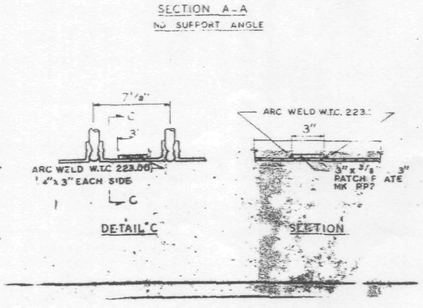
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

SKIDMORE · OWINGS · MERRILL
CRS STEVENS ROBERTSON
Structural & Civil Engineers
APPROVED
DATE 4/23/69 SK

REF. DRWGS.

7-AB2-5 & 11	7-26-68
7-AB3-47	1-6-69
7-AB4-3	10-15-68
7-AB4-15 & 16	7-26-68
7-AB4-42	10-15-68
SZ-124	10-11-68
7-AB1-5	10-15-68
7-AB1-2 & 3	7-26-68

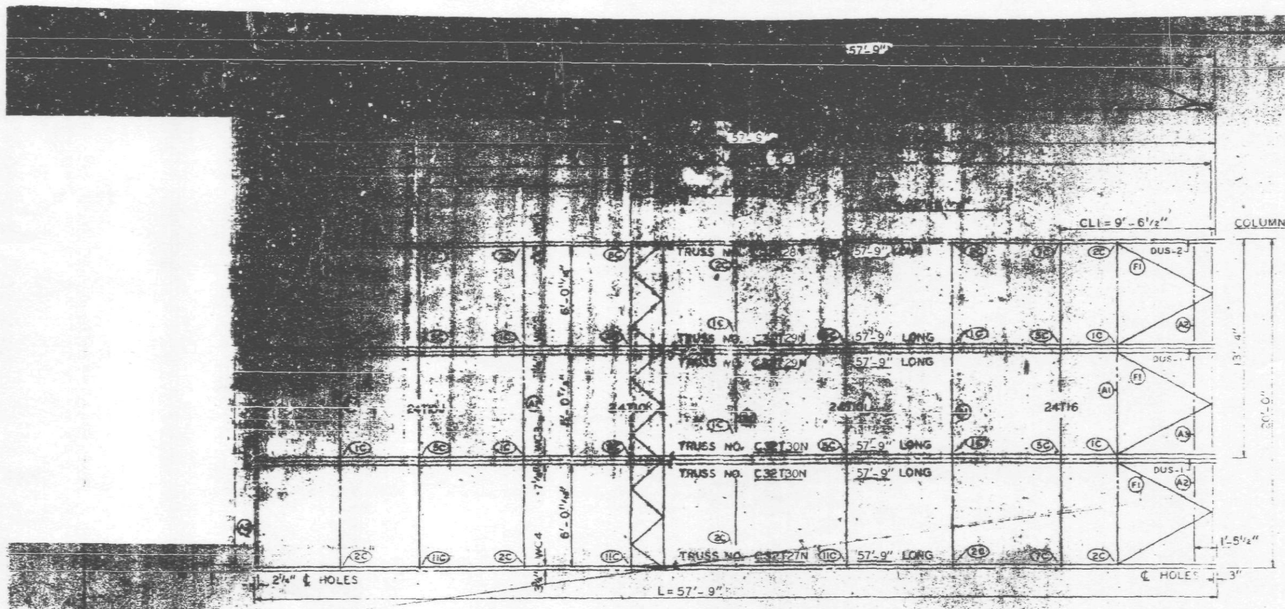


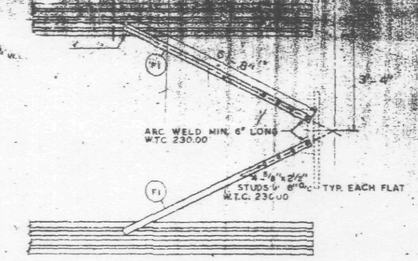
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (NORTH & SOUTH)
PANEL D3N - 20' x 57'-9"
BLDG. B FLOORS 44 (EAST & WEST)

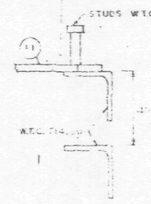
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB2-47	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY: adc DATE MARCH 26, 1969	
APPROVED FOR FABRICATION BY: ____ FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE MARCH 28, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DEVELOPED BY: A. DANT-WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP D3N





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED IN A CIRCLE BY W.T.C. 223.00



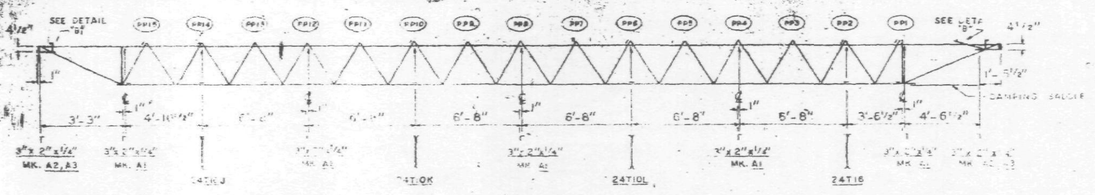
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-1" ABOVE COLUMN. CLIPS FOR TRUSS BEARING

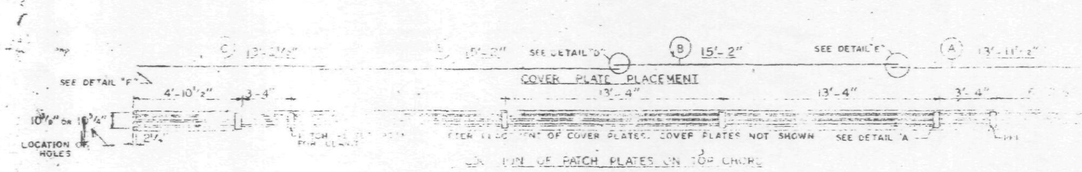
REQUIRED MATERIAL			SIZE	DRW
FLOOR TRUSSES	T27N	2	C32T27N – 57'-9"	ST 227N
	T28N	2	C32T28N – 57'-9"	ST 228N
	T29N	2	C32T29N – 57'-9"	ST 229N
	T30N	2	C32T30N – 57'-9"	ST 230N
BRIDGING TRUSSES	T10J	1	24T10J – 10'-11"	ST 210J
	T10K	1	24T10K – 10'-11"	ST 210K
	T10L	1	24T10L – 10'-11"	ST 210L
	T16	1	24T16 – 10'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
DIAGONAL FLATS	F1	9	1 1/2" x 3/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	CL	24	6" x 3 1/2" x 1/4" x 0'-8"	ST 400
⅝ SHEAR ANCHOR	SH2	8	⅝" ø STUD x 0'-2"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 1/2" x 3'-6 1/4"	ST 298
	DUS-2	2	3/16" x 3 1/2" x 3'-6 1/4"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
	CB4	8	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/16" x 3 1/2" x 6 1/2"	ST 400
	P2	1	4 5/8" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .39" x 0'-9"	ST 400

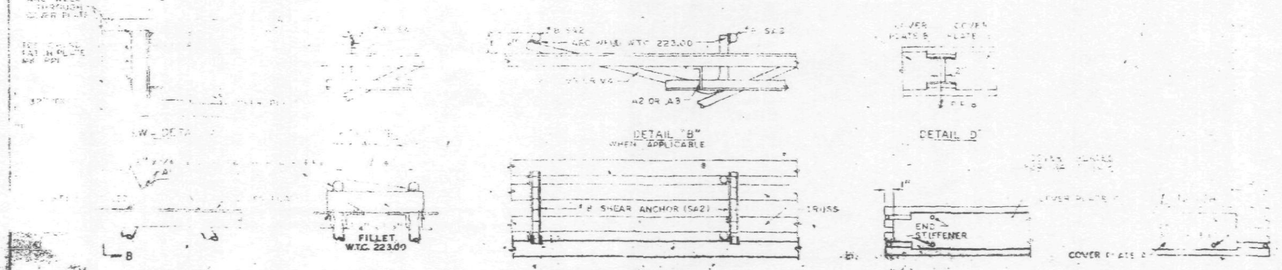
NOTES: (1) ALL SHOP WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. (2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

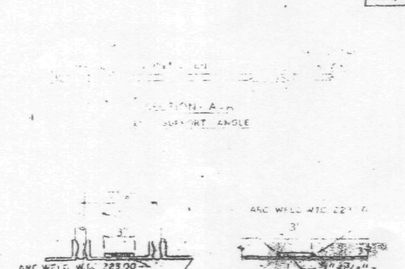
⅝ ø SHEAR ANCHORS NO.4 ARE RELATED TO HOLES PUT IN BOTTOM CHORD OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

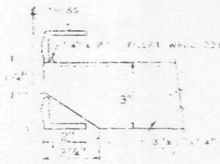
PANEL NO. DR3N SIZE 20' x 57'-9"











DETAIL
SCREAT ANGLE ATTACHMENT

SKILLING · HELLE CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
REJECTED
DATE 4/23/69 BY SK

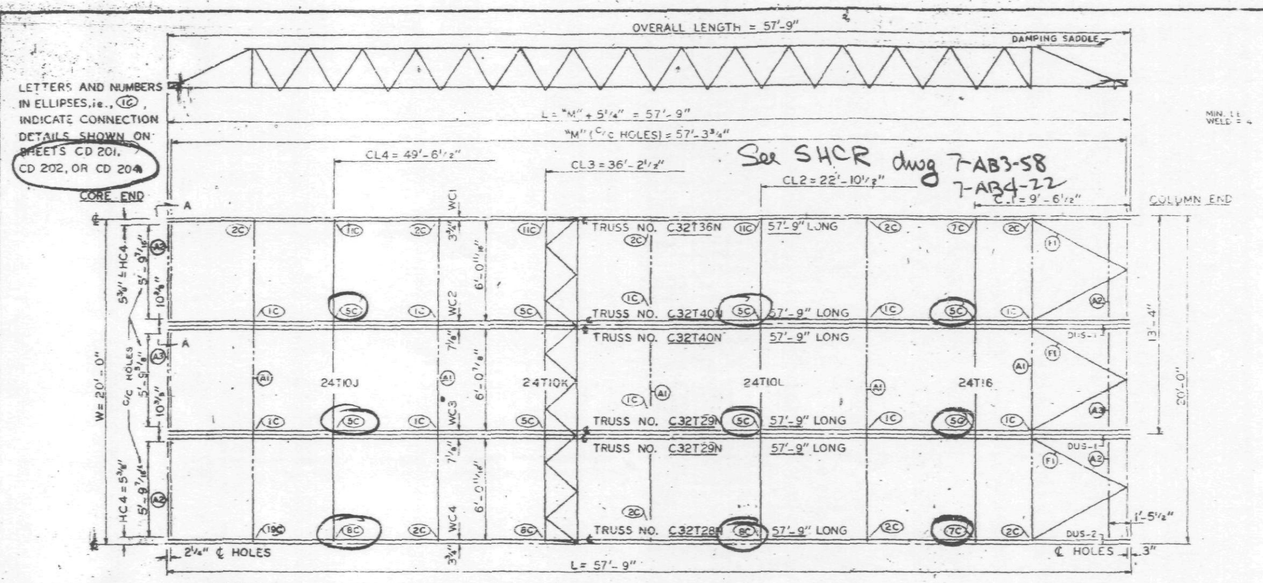
NO.	DATE	REVISION	BY

REF. DRWGS

[illegible] S1	7-22-68
[illegible] -48	1-6-69
[illegible]	10-15-68
[illegible] 4, 5 & 16	7-22-68
[illegible] 12	10-15-68
[illegible] 24	10-11-68
[illegible] 5	10-13-68
[illegible] 2, 3 & 4	7-22-68

[illegible] END [illegible]
[illegible] NEAR [illegible] THEATRE
[illegible] 44 (NORTH & SOUTH)
PANEL DR3N 20' x 57'-9"
BLDG. B FLOORS - 44 (EAST & WEST)
[illegible] STEEL COMPANY

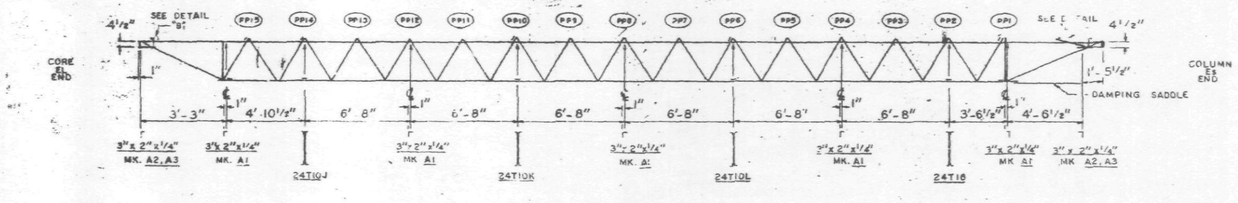
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-48 1-6-69	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR [illegible]	DATE	DRAWN BY gdc DATE MARCH 26, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE MARCH 26, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP DR3N

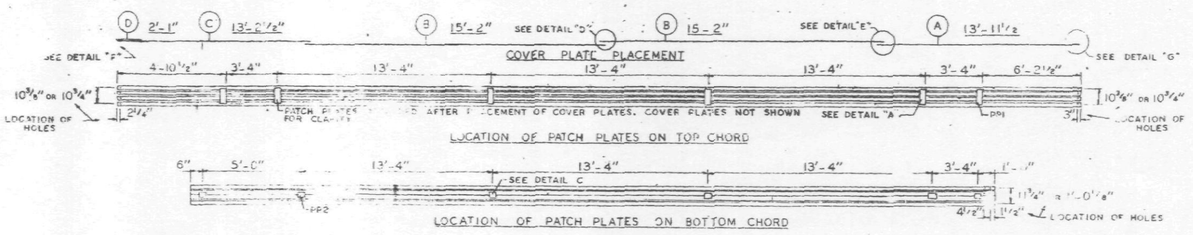


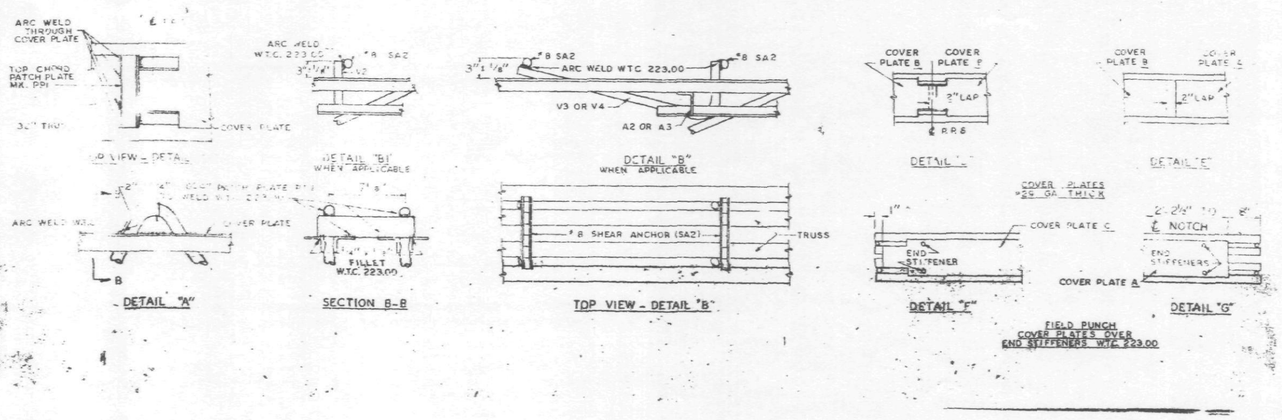
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

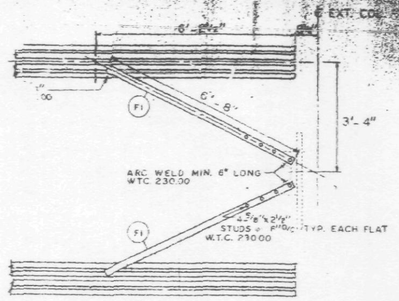
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D8N SIZE 20' x 57'-9"

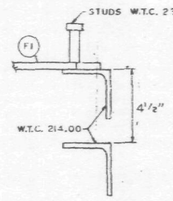








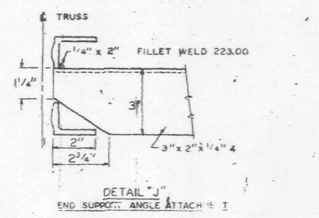
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

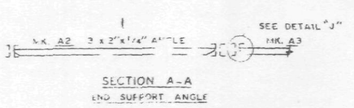


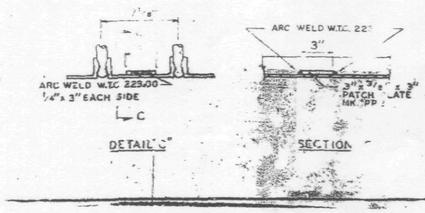
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

				REF. DWG.
FLOOR TRUSSES	T10N	2	24T10N - 57'-9"	ST 210N
	T40N	2	24T40N - 57'-9"	ST 240N
BRIDGING TRUSSES	T10J	1	24T10J - 19'-11"	ST 210J
	T10K	1	24T10K - 19'-11"	ST 210K
	T10L	1	24T10L - 19'-11"	ST 210L
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 3/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 5/8" x 0'-3"	ST 400
COVER PLATES	A	3	6" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	6" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2 1/2" x 2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/4" x 3'-6 1/2"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/4" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P4	3	8 1/2" x 1 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .39" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUA..
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.







NO.	DATE	REVISION	BY

SKILLING-HELLE CHRISTIANSEN-ROBERTSON Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
REJECTED
Date 4/23/69 By OK

REF. DRWGS.

7-AB2-5 & 11	7-24-68
7-AB3-58	1-6-69
7-AB4-3	10-15-68
7-AB4-15 & 16	7-24-68
7-AB4-42	10-15-68
SF-124	10-11-68
7-381-5	10-15-68
7-381-2 & 3	7-24-68

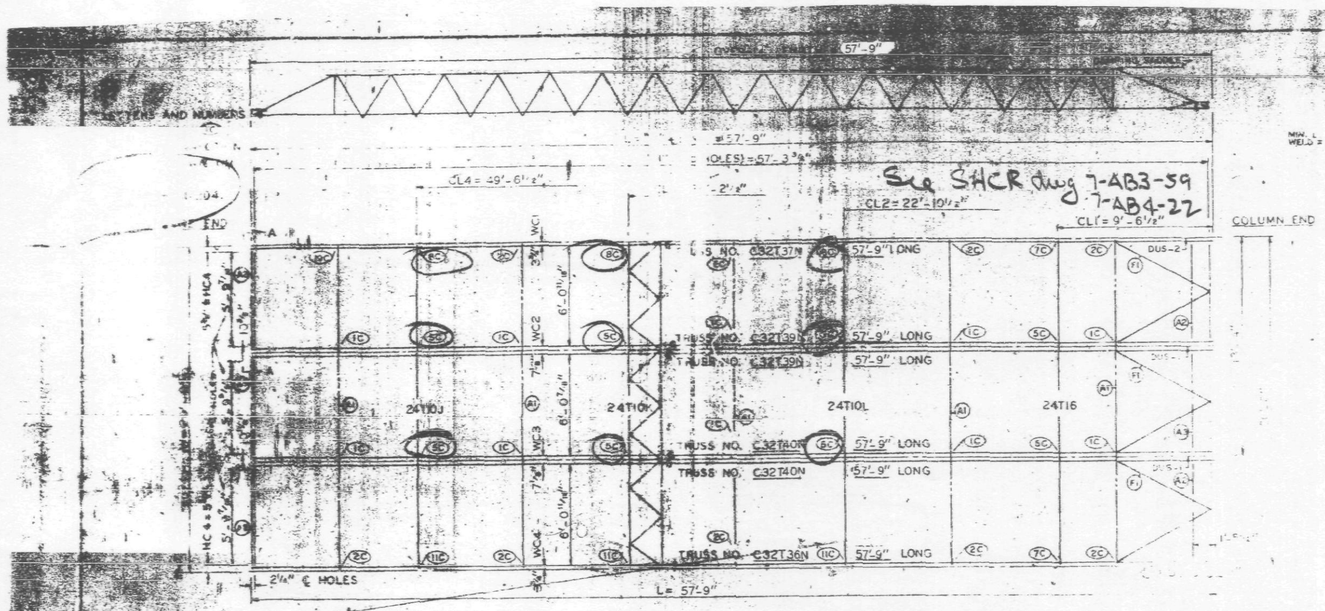
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (SOUTH ONLY)

PANEL D8N- 20' x 57'-9"

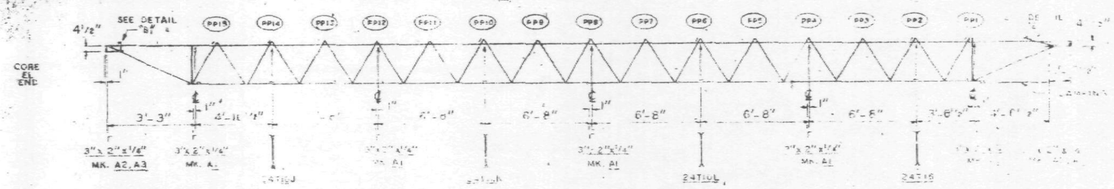
FABRICATION BY LACLEDE STEEL COMPANY

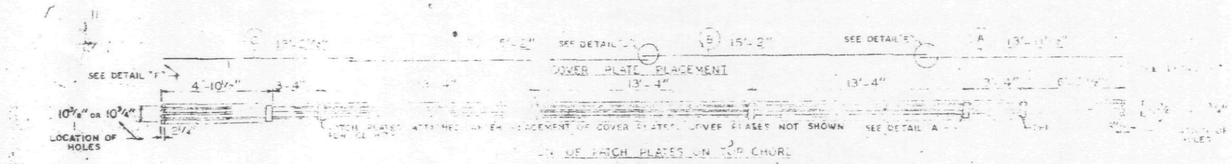
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB2-58	PLATE -
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: gdc DATE MARCH 26, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE MARCH 26, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP D8N

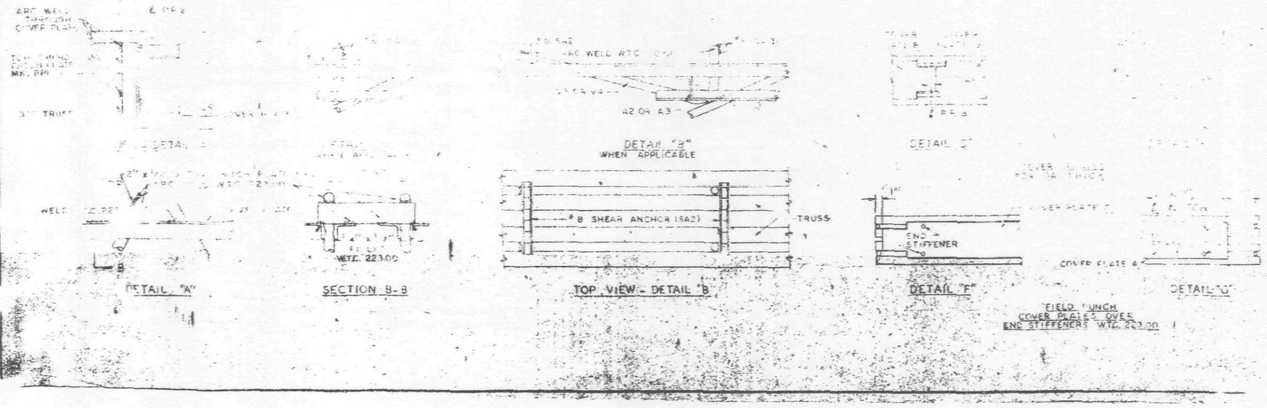


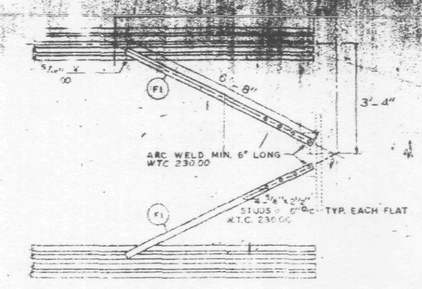
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

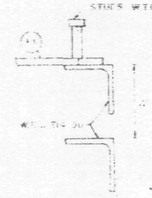
PANEL NO. DR8N SIZE 20' x 57'-9"





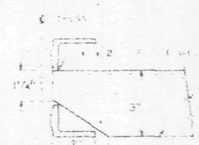


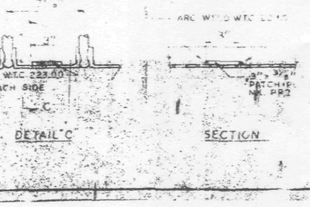




PIECE MARK		QUANTITY				
MATERIAL						
FLOOR TRUSSES	T2C	2		C32T40N	57'-9"	8TN
	T2A	2		C32T39N	57'-9"	8TN
	T2C	2		C32T36N	57'-9"	8TN
	TAC	2		C32T40N	57'-9"	ST 400
BRIDGING TRUSSES	T10J	1		24T10J	9'-11"	ST 2101
	T10K	1		24T10K	9'-11"	ST 2101
	T10L	1		24T10L	9'-11"	ST 2101
	T16	1		24T16	9'-11"	ST 216
3"x 2"x¼" ANGLE	A1	5	3" x 2" x ¼"		10'-11"	ST 403
	A2	4	3" x 2" x ¼"		5'-11"	ST 403
	A3	2	3" x 2" x ¼"		5'-11"	ST 403
DIAGONAL FLATS	F1	6	⅜" x 3" x 2' 8"-8"			ST 403
PATCH PLATES	PP1	18	2" x 1'4" x 0'-9"			ST 400
	PP2	18	2" x 3'8" x 0'-3"			ST 400
COVER PLATES	A	3	8" x .0135" x 13'-11½"			ST 303
	B	8	8" x .0135" x 15'-2"			ST 303
	C	3	8" x .0135" x 13'-2½"			ST 303
ANGLE CLIPS	C1	24	2"x 3"x" x ½" x 0'-8"			ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-8"			ST 400
BEARING SADDLE	DUS-2	2	3½" x 3½" x 3'-6¼"			ST 298
	DUS-2	1	3½" x 3½" x 3'-6¼"			ST 298
CONNECTION BAR	CB1	4	1" ϕ x - 3"			ST 400
	CB4	8	1" ϕ x - 10"			ST 400
CONNECTION PLATES	P1	4	3½" x 3" x 8½"			ST 400
	P2	1	4½" x .39" x 0'-9"			ST 400
	P3	1	4½" x 10" x 1'-0"			ST 400
	P4	3	6½" x 1" x 0'-8"			ST 400
	P6	1	4½" x .39" x 0'-7"			ST 401

NOTES: ALL WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
ALL UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET





NO.	DATE	REVISION	BY

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
DATE 4/23/69 BY SK

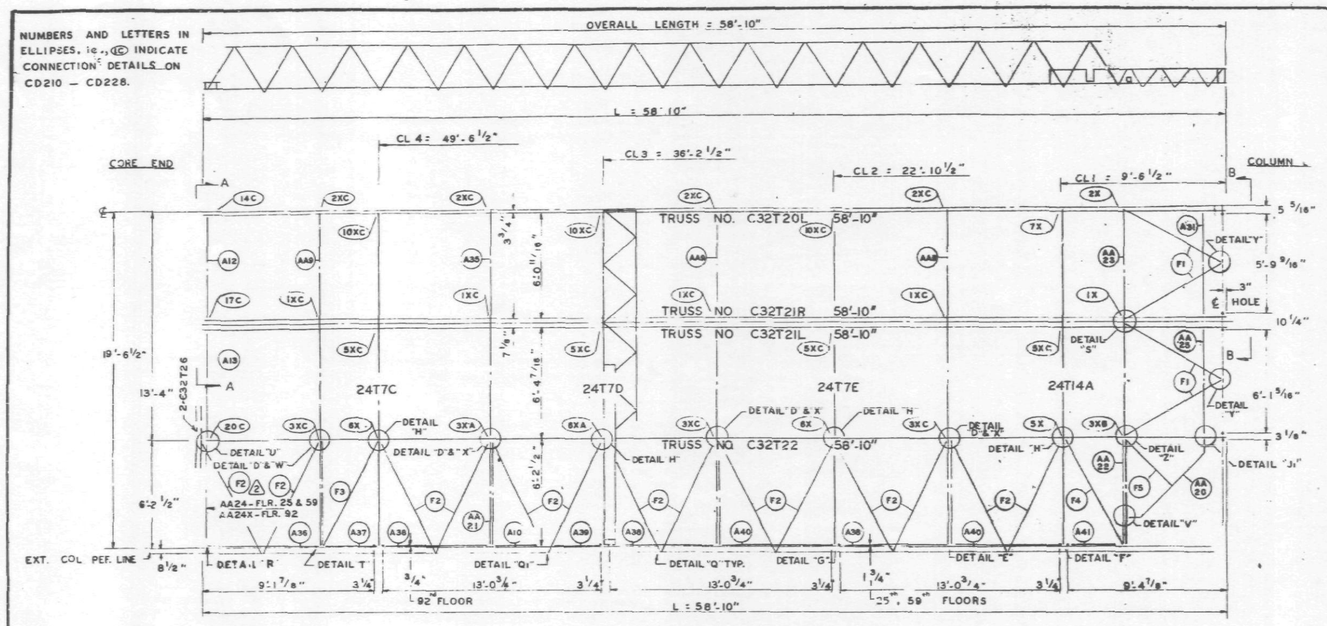
REF. DRWGS.

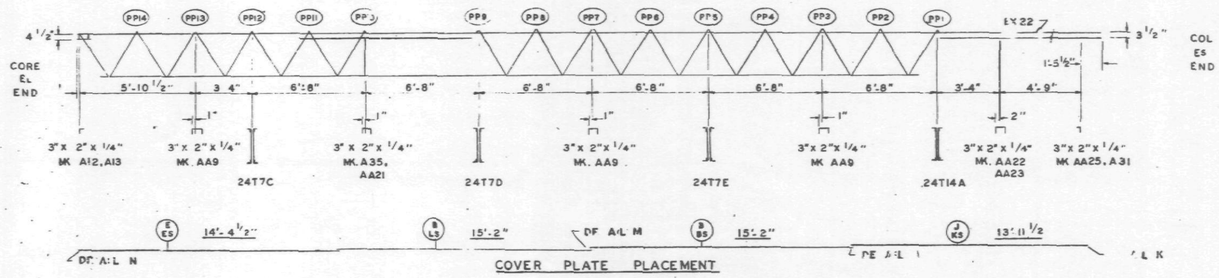
7-102-5 & 11	7-22-68
7-AB3-59	1-6-69
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	1-6-69
7-FB1-5	10-15-68
7-A101-2,3 & 4	7-22-68

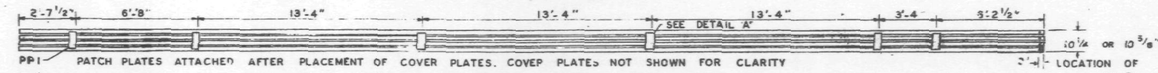
PANEL DETAILS
44 (SOUTH ONLY)
PANEL DR8N 20' x 57'-9"

FABRICATED BY LA CLEDE STEEL COMPANY
AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-59
APPROVED FOR FABRICATION BY ____ FOR DWG'S
DATE
DRAWN BY G&C
DATE MARCH 27, 1969
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR
DATE
CHECKED BY T.M.CHURA
DATE MARCH 27, 1969
IN CHARGE OF SHOP DWG.
DETAILED
FABRICATION CONT. NO. A.T.C. 221
SHEET NO. FP-DR8N
LACLEDE STEEL CO.

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTIONS DETAILS ON CD210 – CD228.

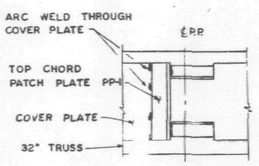




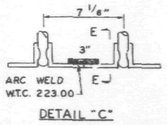


LOCATION OF PATCH PLATES ON TOP CHORD

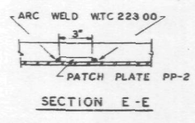
LOCATION OF PATCH PLATES ON BOTTOM CHORD



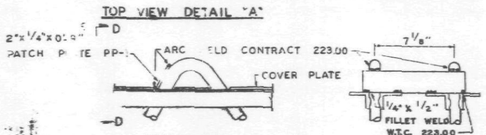
TOP VIEW DETAIL "A"



DETAIL "C"

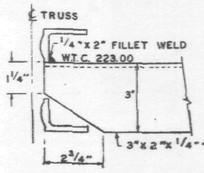


SECTION E-E

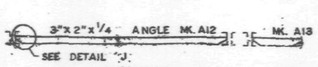


DETAIL "A"

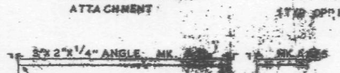
SECTION D-D



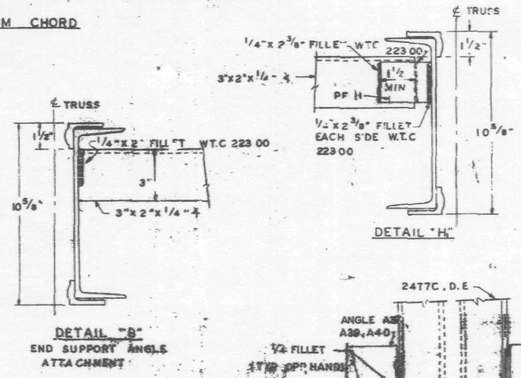
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

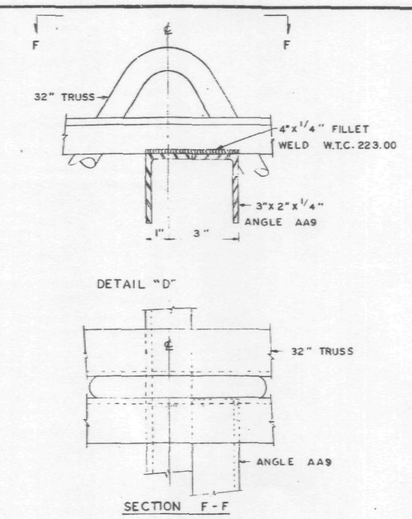


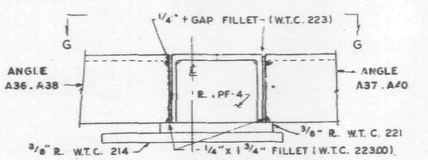
SECTION A-A
END SUPPORT ANGLES

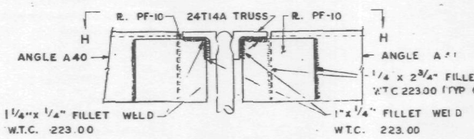


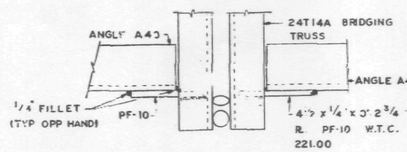
SECTION B-B
END SUPPORT ANGLE

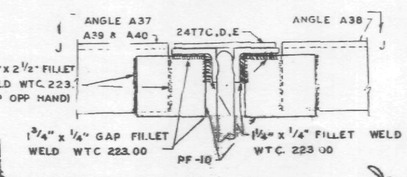












REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T20L	1	C32T20L- 58'-10"	ST 220L
	T21L	1	C32T21L- 58'-10"	ST221L
	T21R	1	C32T21R- 58'-10"	
	T22	1	C32T22- 58'-10"	ST 222
BRIDGING TRUSSES	T7C	1	24T7C - 19'-6"	BT207C
	T7D	1	24T7D - 19'-6"	BT207D
	T7E	1	24T7E - 19'-6"	BT207E
	T14A	1	24T14A - 19'-6"	BT214A
3" x 2" x 1/4" ANGLES	A10	1	3" x 2" x 1/4" x 2'-7 15/16"	ST 404
	A12	1	3" x 2" x 1/4" x 5'-11 11/16"	ST 404
	A13	1	3" x 2" x 1/4" x 6'-3 7/16"	ST 404
	A31	1	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
	A36	1	3" x 2" x 1/4" x 5'-11 1/2"	6T 410
	A37	1	3" x 2" x 1/4" x 2'-10"	ST 410
	A38	3	3" x 2" x 1/4" x 6'-4"	ST 410
	A39	1	3" x 2" x 1/4" x 2'-9"	ST 410
	A40	2	3" x 2" x 1/4" x 6'-2"	ST 410
	A41	1	3" x 2" x 1/4" x 2'-10 3/4"	ST 410
	A35	1	3" x 2" x 1/4" x 13'-3"	ST 410
ANGLE ASSEMBLY	AA21	1	SEE REF. DRWG.	ST 411
	AA22	1	SEE REF. DRWG	ST 411
	AA23	1	SEE REF. DRWG.	ST 411
*AA24 IS REPLACED BY AA24X ON FLR. 92. (2)	AA24	1	SEE REF. DRWG.	ST 412
	AA25	1	SEE REF. DRWG.	ST 412
	AA26	1	SEE REF DRWG.	ST 412
	AA9	3	SEE REF. DRWG.	ST 404
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST 400
	PP2	6	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	1	9" x 0135" x 13'-11 1/2"	ST 303
	As	1	3 1/2" x 0135" x 13'-11 1/2"	ST 304
	B	2	9" x 0135" x 15'-2	ST 303
	Bs	1	3 1/2" x 0135" x 15'-2"	ST 303
	Ls	1	3 1/2" x 0135" x 15'-2"	ST 304
	E	1	9" x 0135" x 14'-4 1/2"	ST 303
	Es	1	3 1/2" x 0135" x 14'-4 1/2"	ST 303
(2) ANGLE CLIPS**	C1	12	2" x 1" x 2" x 25" x 8"	ST 400
	C2	4	2 1/2" x 1" x 2" x 25" x 8"	
DIAGONAL FLATS	F1	4	1 1/2" x 3/8" x 6'-8"	ST 402
	F2 & F2-1	7	1 1/2" x 3/8" x 6'-10 1/2"	ST 402
	F3	1	1 1/2" x 3/8" x 6'-11 1/4"	ST 402
	F4	1	1 1/2" x 3/8" x 7'-0"	ST 402
	F5	1	1 1/2" x 5/8" x 4'-4"	ST 402
MISC. PLATES	PF-1	2	1 1/2" x 1/2" x 0'-4"	ST 400
	PF 3	5	3 1/2" x 3/8" x 0'-5"	ST 400
	PF-7	1	5" x 3/8" x 0'-4"	ST 401
	PF-8	5	3 1/2" x 1/2" x 0'-2 7/8"	ST 401
	PF-10	8	4 1/2" x 1/4" x 0'-2 3/4"	ST 401
	PF-11	1	3" x 1/4" x 0'-2 3/8"	ST 412
EXTENDED END	EX 22	1	SEE REF DRWG	ST 222

(2) ** NUMBER OF PIECES OF MK. C1 & C2 WILL BE CORRECT AFTER FLOOR 32, TOWER A.
PIECES FOR FLOORS 10-32 IS C1, NONE – C2, SIXTEEN (16).

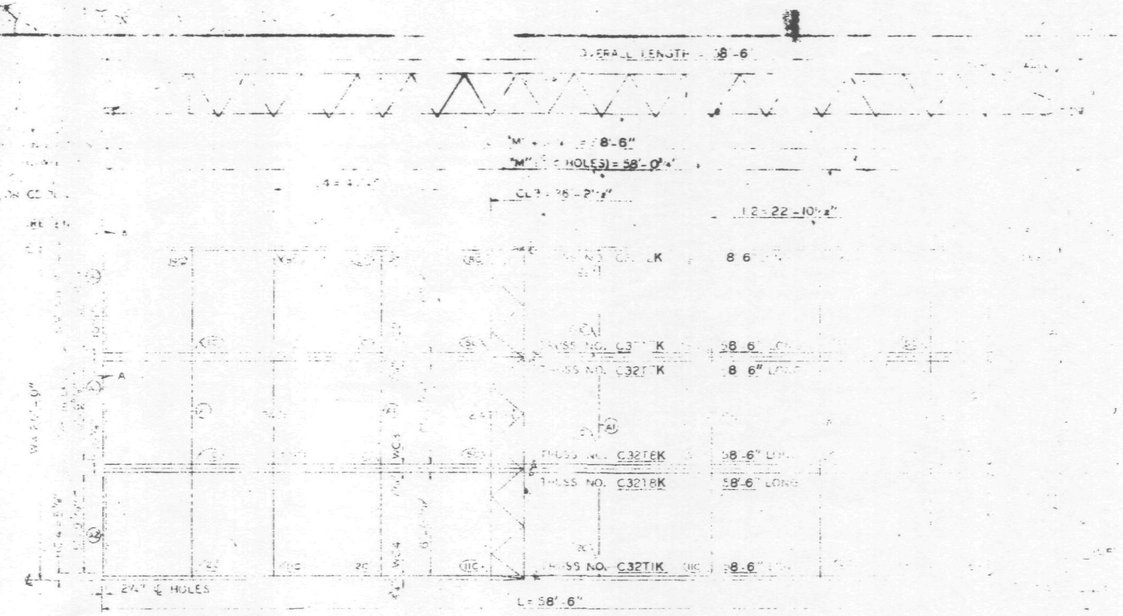
NO.	DATE	REVISION	BY
(2)	7-1-69	AS NOTED	G.D.C.
(1)	2-5-69	GENERAL	G.D.C.

SEE SHEET FP-F2-2 FOR NOTES. REF DRWG & ADDITIONAL DETAILS

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

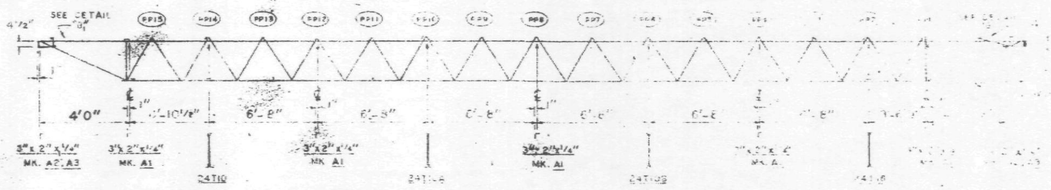
BLDG A FLOORS 25, 59 & 92 (NORTH & SOUTH)
PANEL F2 19'-6" x 58'-10"
BLDG. B FLOORS 25, 59 & 92 (EAST & WEST) (2)

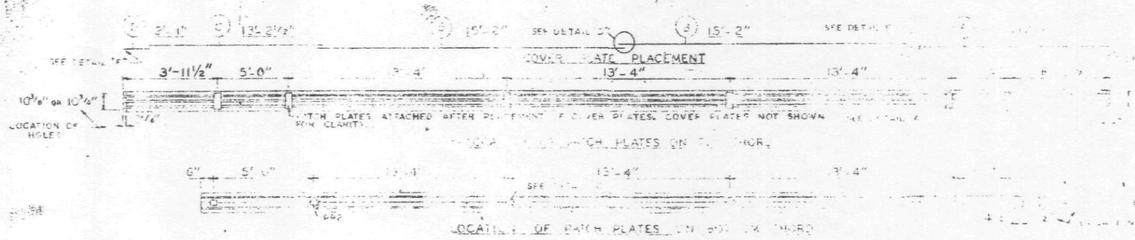
FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-34
PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE 1/10/69
DRAWN BY: DATE DEC 3, 1968
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE DEC 4, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER
LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-F2

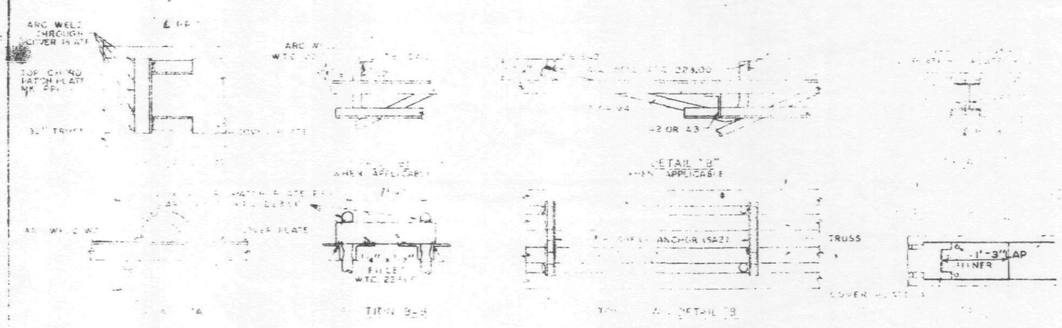


℄ & DIMENSION NOS ARE RELATED TO HOLES FIT IN BEARING ENDS OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIK SIZE 20' x 58'-6"



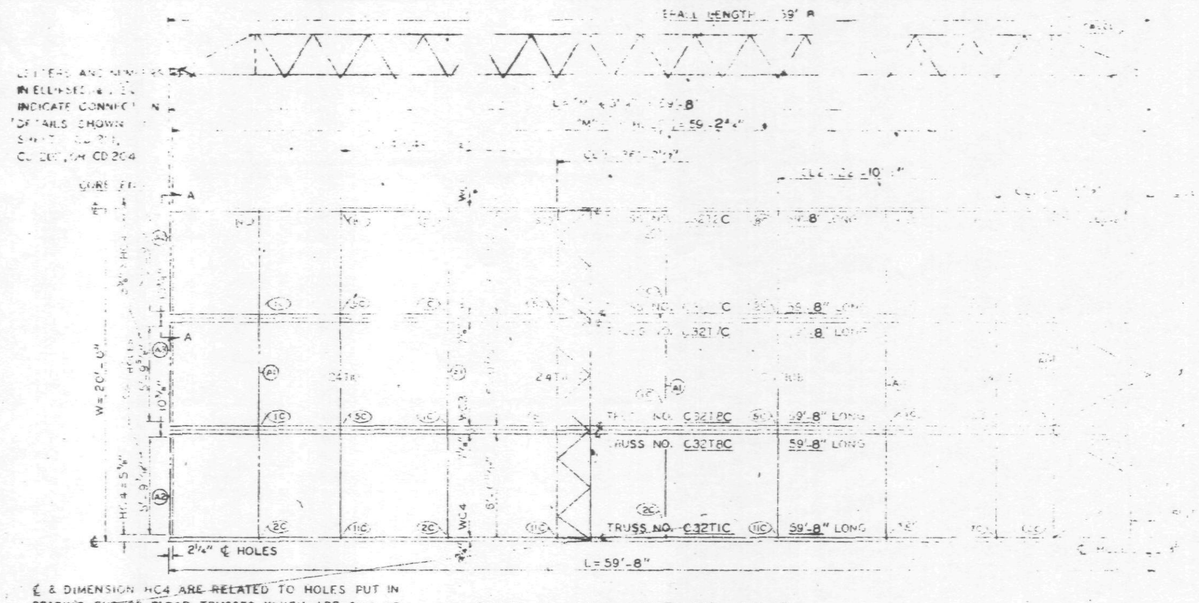




K IK 8 6 K
K K 8 6 IK
IK K 8 6 2IK
K K 8 6 4K
2
4
TI 2108

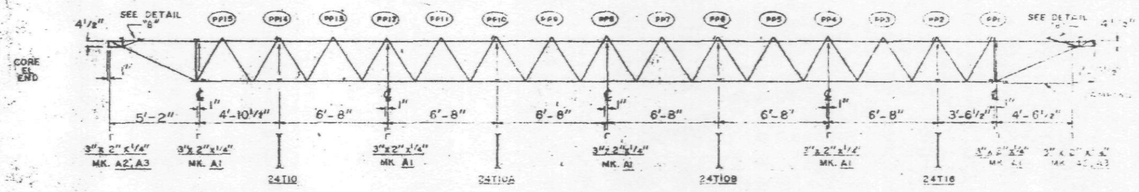
7-22-68
10
& 40 10 15
, 16 & 39 7 22
-3.1 1 3
11
7 22
7 22
7-ABI-5 10-15-68

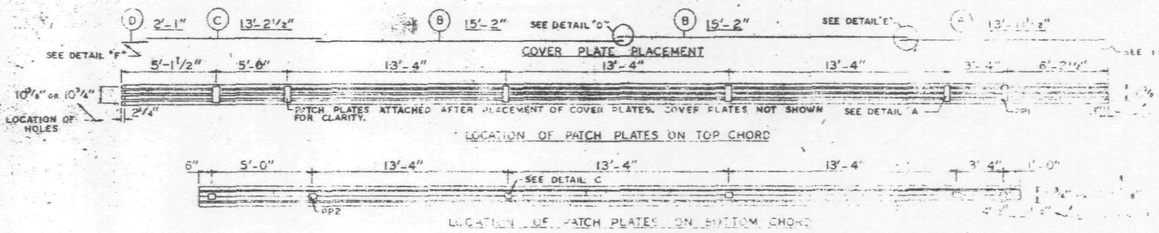
45-46(N)
IK 8 6
10
11/7/68
OCT. 31, 1968



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

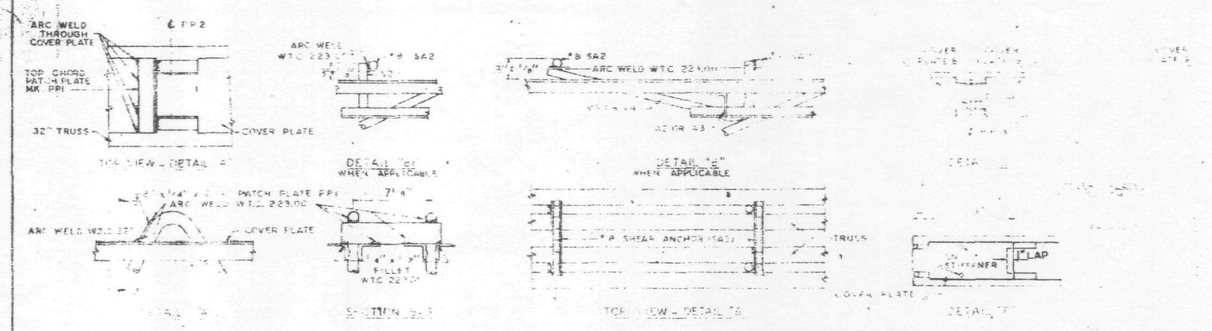
PANEL NO. D1C SIZE 20' x 59'-8"





LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD



C	C	8"	20IC
C	C	8	ST 20ZC
C	C	8"	ST 0"C
C	C	9-8	ST 20IC

7-EB2-5 & 11	7-22-68
7-EB2-10	10-15-68
& 42	10-15-68
15, 16 & 30	7-22-68
7-31	1-3-[illegible]
[illegible]	5-31-68
[illegible]	7-22-68
[illegible]	7-22-68
7-ABI-5	10-15-68

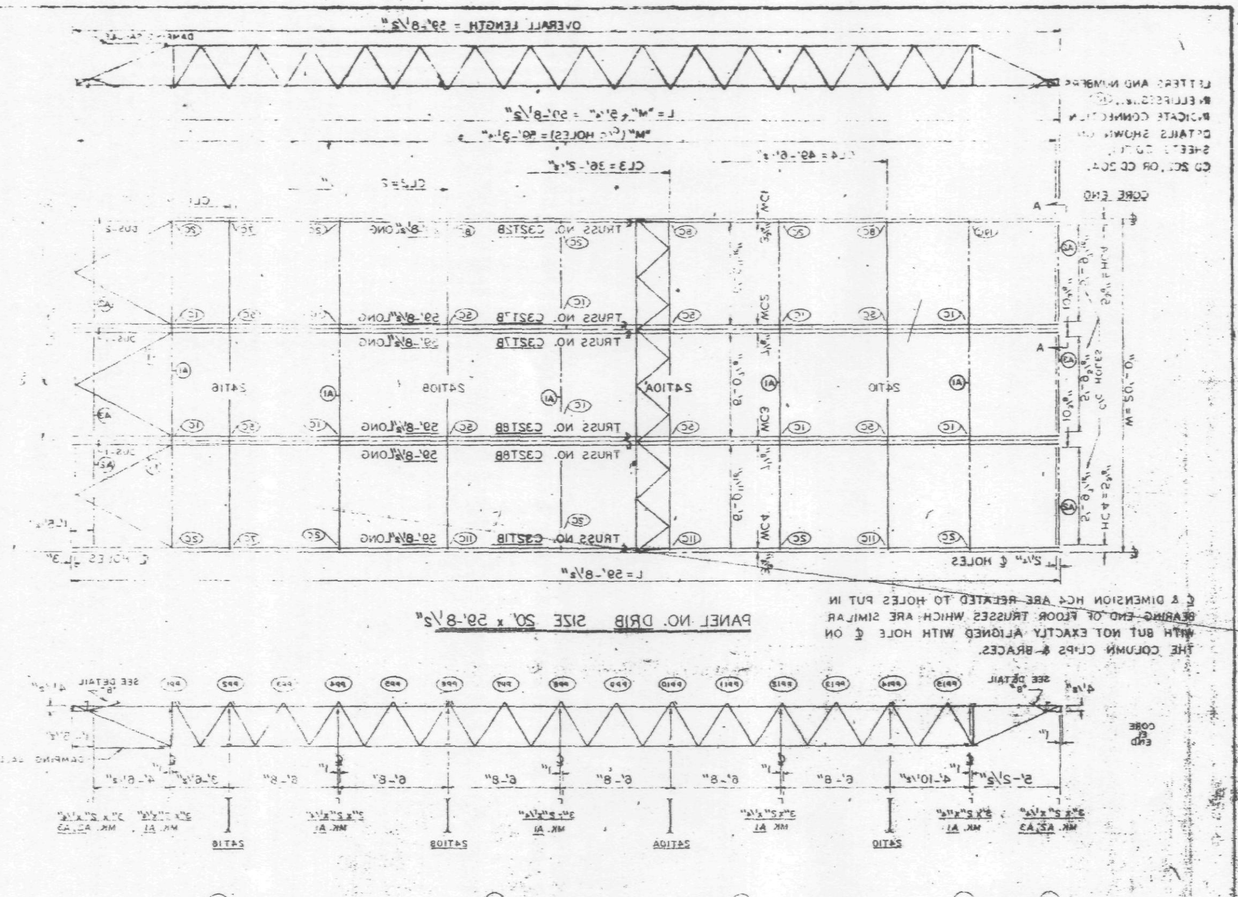
50-58, 60-66, 68-74, 80-91, 93-106 (S)

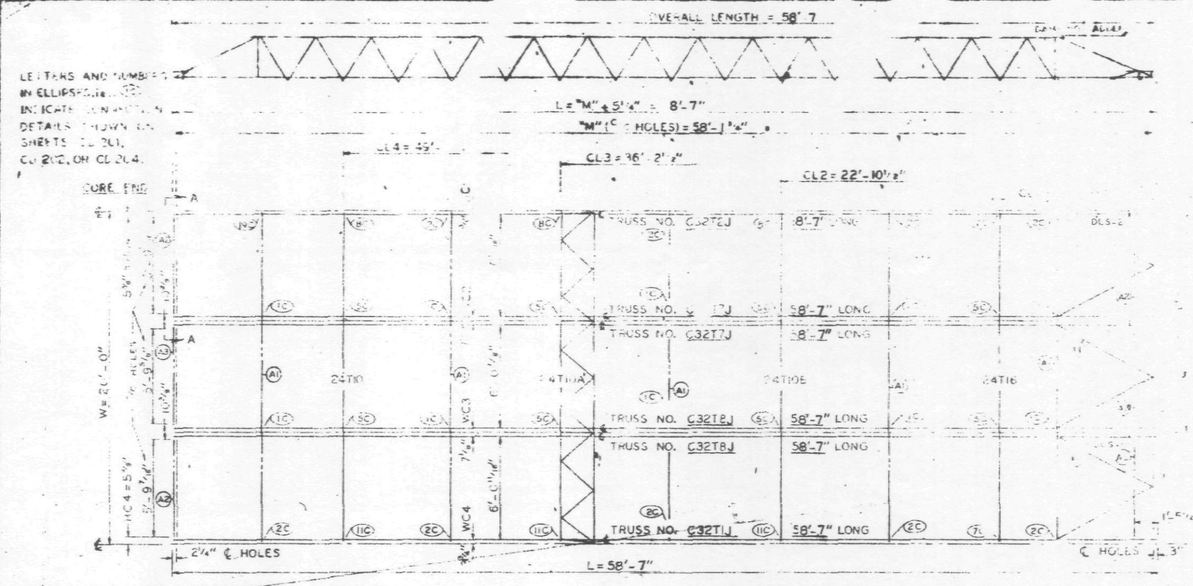
IC 8

11/7/68

OCT. 31, 1968

D1C

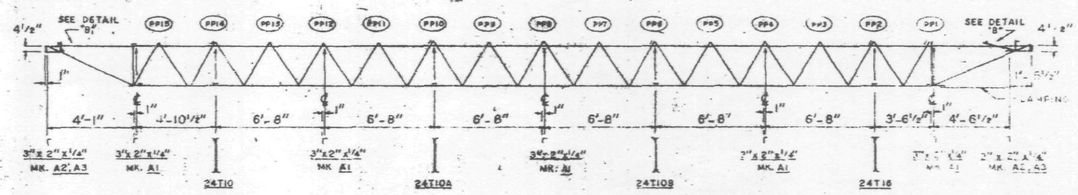

OVERALL LENGTH = 59'-8½"
L = "M" @ 9'-0" = 59'-8½"
"M" (NO. HOLES) = 60'-3"
CL3 = 39'-2½"
CL4 = 49'-8½"
CORE END
A
TRUSS NO. C3212B
59'-8½" LONG
24"DA
24"DB
24"C
24"D
MC1
MC2
MC3
MC4
MC5
W = 5'-0"
HC4 = 5'-8½"
½" ø HOLES
PANEL NO. DRIB SIZE 20' x 59'-8½"
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
SEE DETAIL "B"
4½"
CORE ℄ END
5'-5½"
6'-10½"
6'-8"
3'-6½"
3"x 5½"x ½" MK. A52A3
3"x 5"x ½" MK. A1
3"x 8½"x ½" MK. A1
24"C
24"DB
24"DA
24"D
SEE DETAIL "C"
SEE DETAIL "A"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.
LOCATION OF HOLES
DETAIL "A"
TOP VIEW - DETAIL "A"
DETAIL "B1"
WHEN APPLICABLE
DETAIL "B"
WHEN APPLICABLE
TOP VIEW - DETAIL "B"
SECTION B-B
DETAIL "C"
DETAIL "D"
DETAIL "E"
SECTION A-A
DETAIL "F"

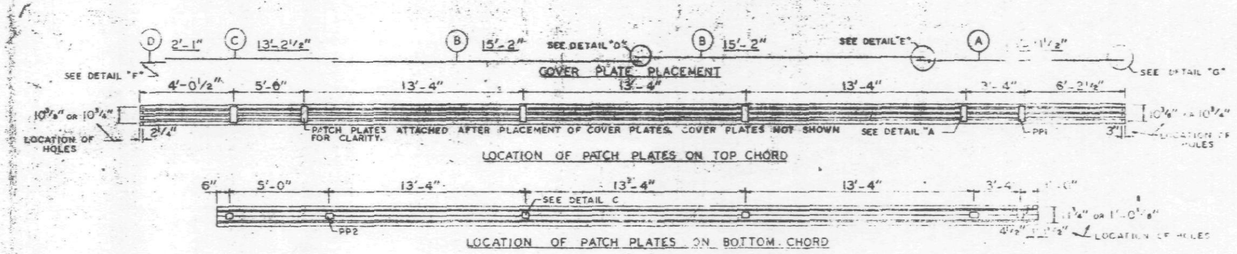


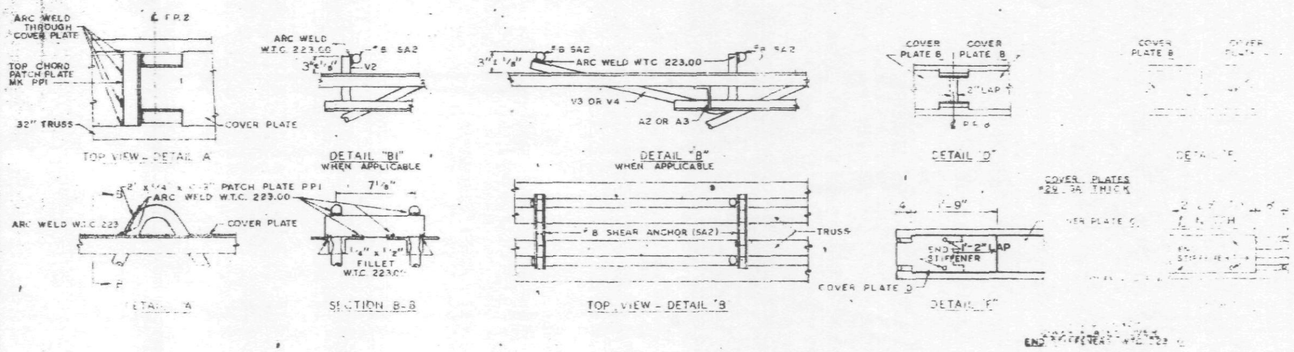
LETTERS AND NUMBERS IN ELLIPSES INDICATE ... DETAILS SHOWN ON SHEETS ... CL 2C1, CL 2C2, OR CL 2C4.

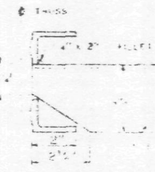
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

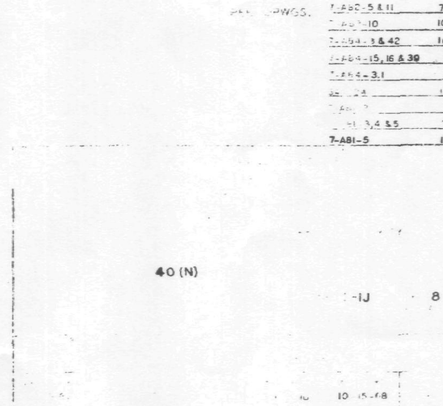
PANEL NO. D1J SIZE 20' x 58'-7"

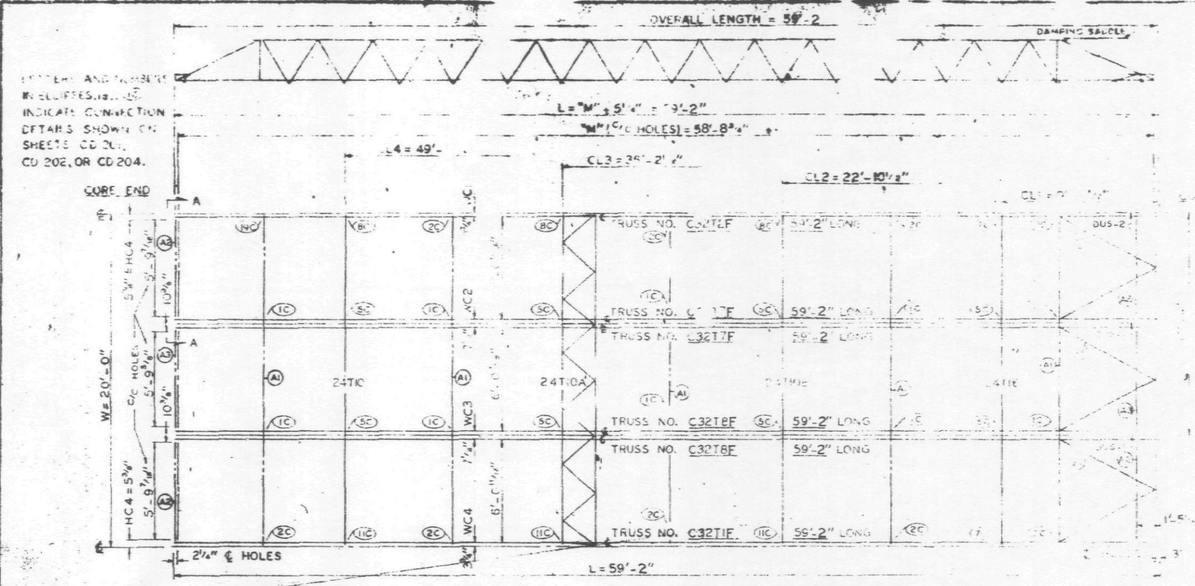






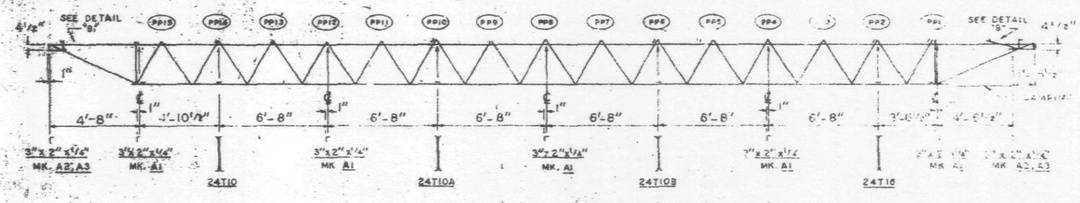


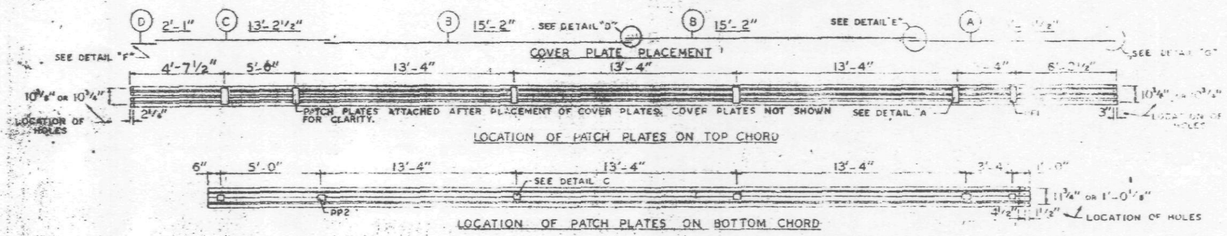


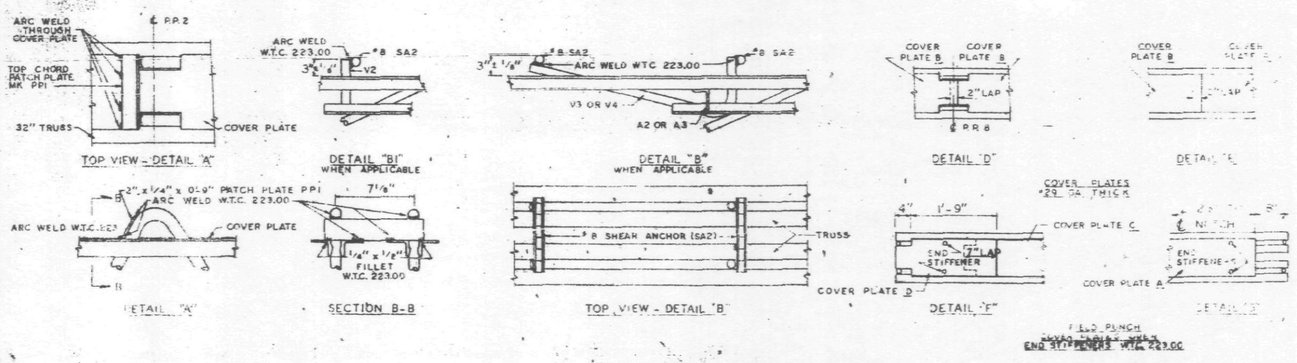


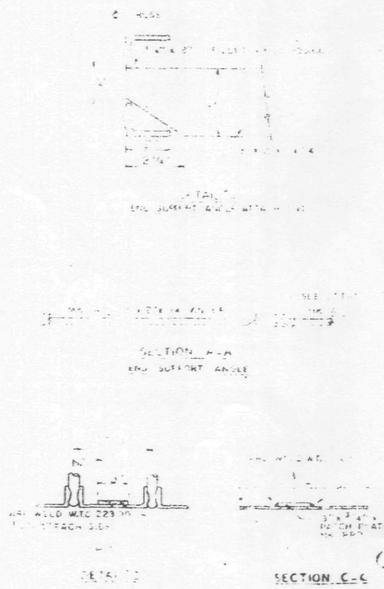
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIF SIZE 20' x 59'-2"









7-A81-5 & 11	7-22-68
7-A81-10	10-15-68
7-A84-1 & 42	10-15-68
7-A84-15, 16 & 39	7-22-68
7-A84-3.1	1-3-69
5A-1103	10-11-68
7-A81-2	7-22-68
7-A81-3, 4 & 5	7-22-68
7-A81-9	10-15-68

47-48, 70-71(N)

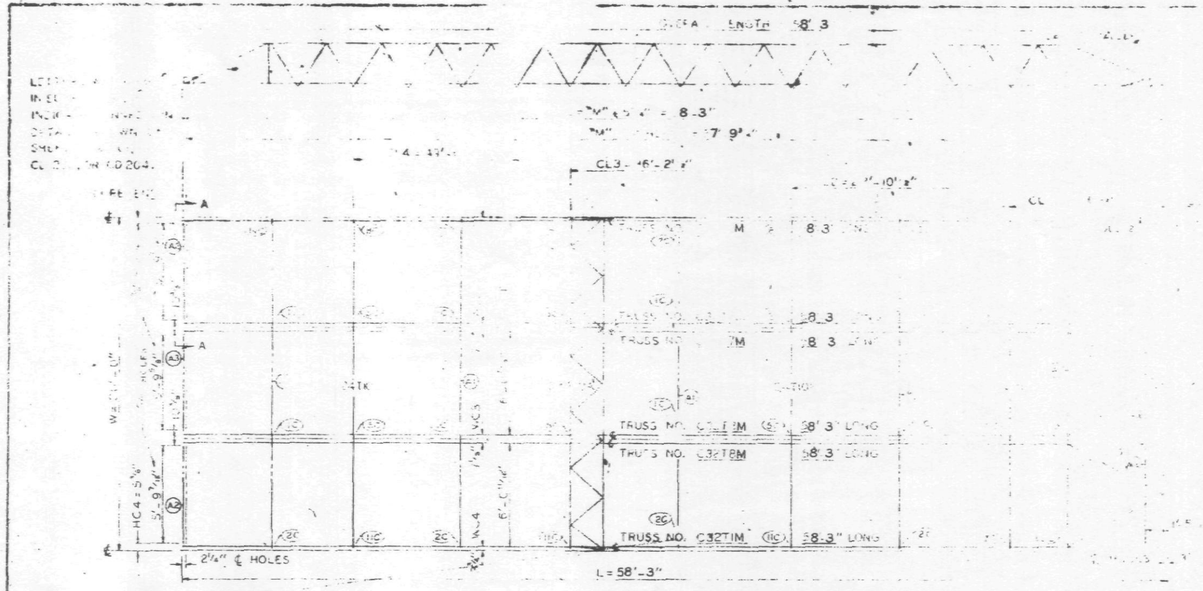
PANEL DRIF 2

11/7/68

DATE OCT 31, 1968

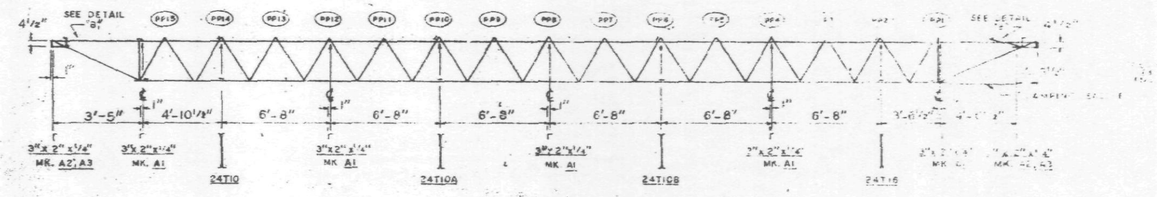
FABRICATION CONTRACT NO. 221

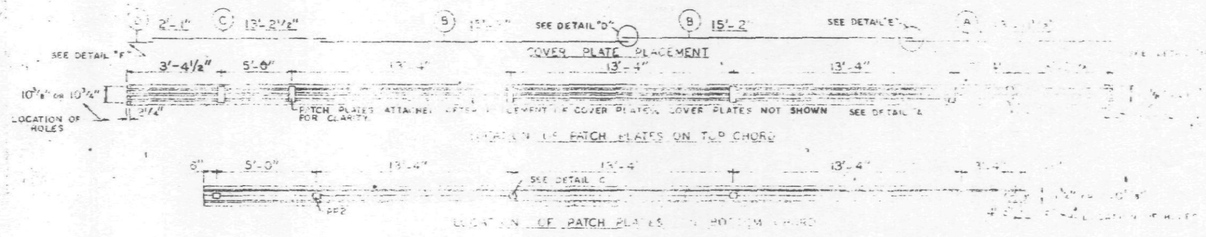
SHEET FP DRIF

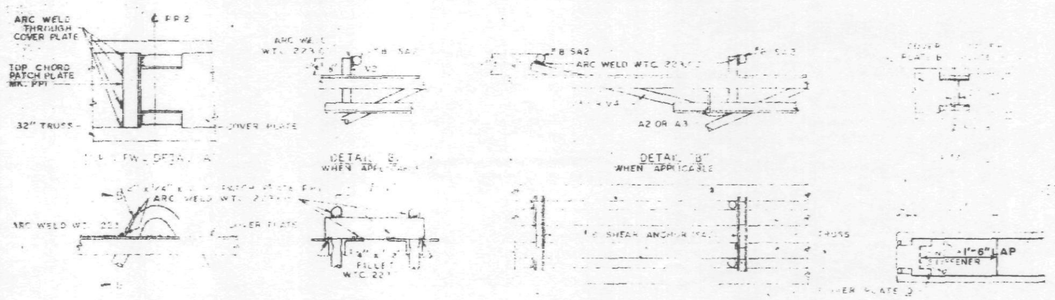


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIM SIZE 8' x 58' 3"







SECTION B-B

M	M	8 3	M
M	M	8 3	32M
M	M	8 3	207M
M	M	8 3	7M
			10

	7-22-68
10	10
1 & 42	10 15
16 & 39	7 22
- 3, 1	1 3
	11
	7 22
	7 22
7-AB1-5	10-15-68

72 - 73 (N)

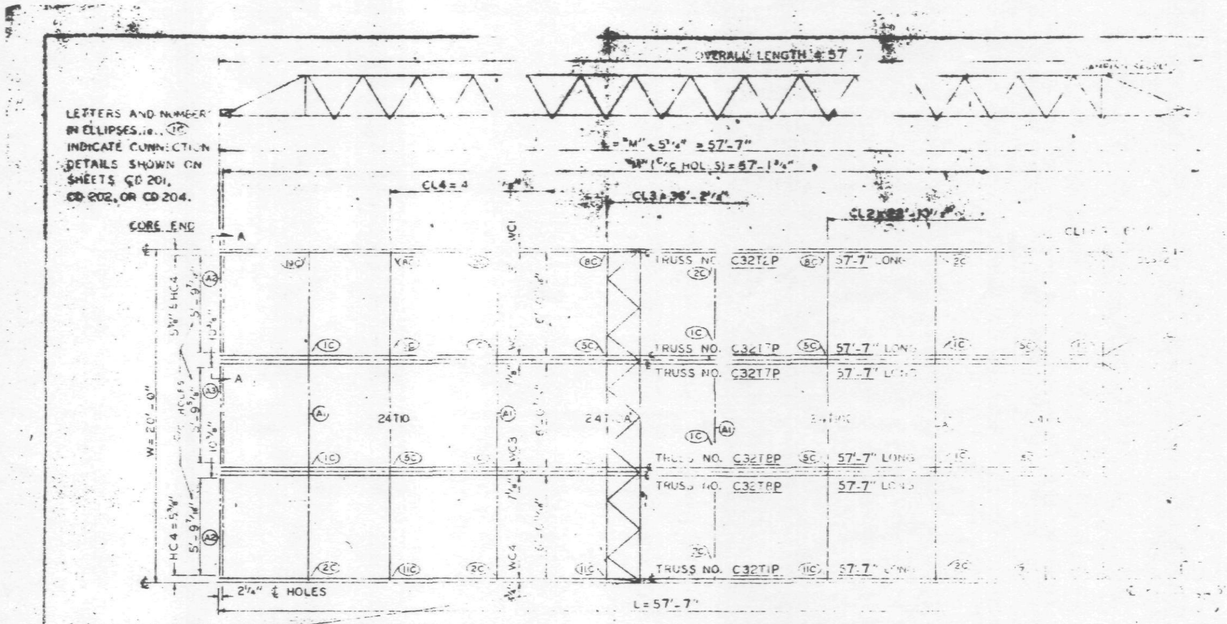
IM 8 3

10

11/7/68

OCT 31, 1968

8'M



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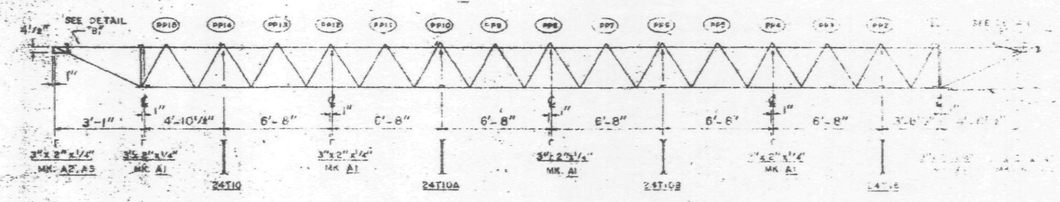
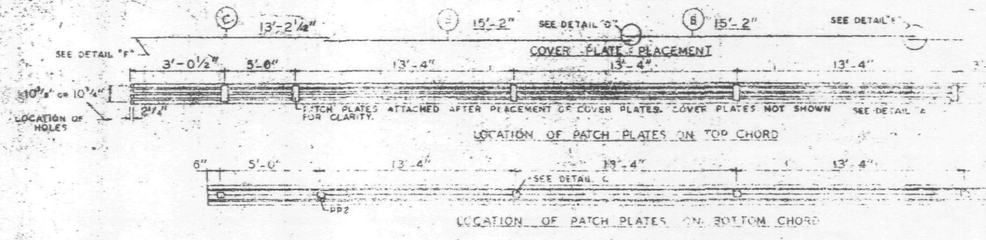
PANEL NO. DRIP SIZE 20' x 57'-7"

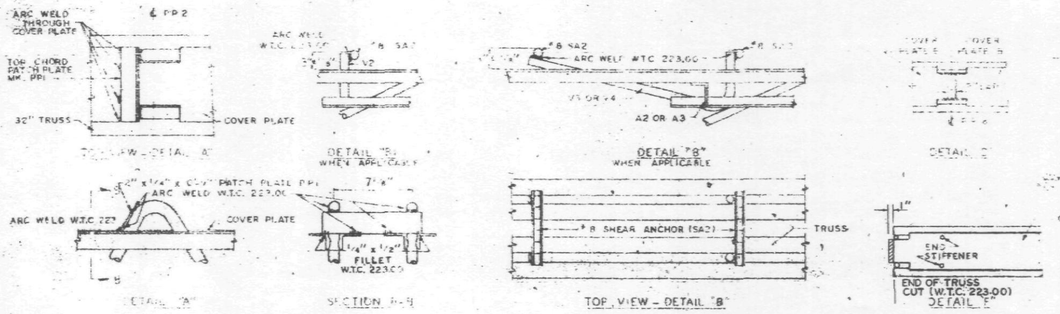




COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

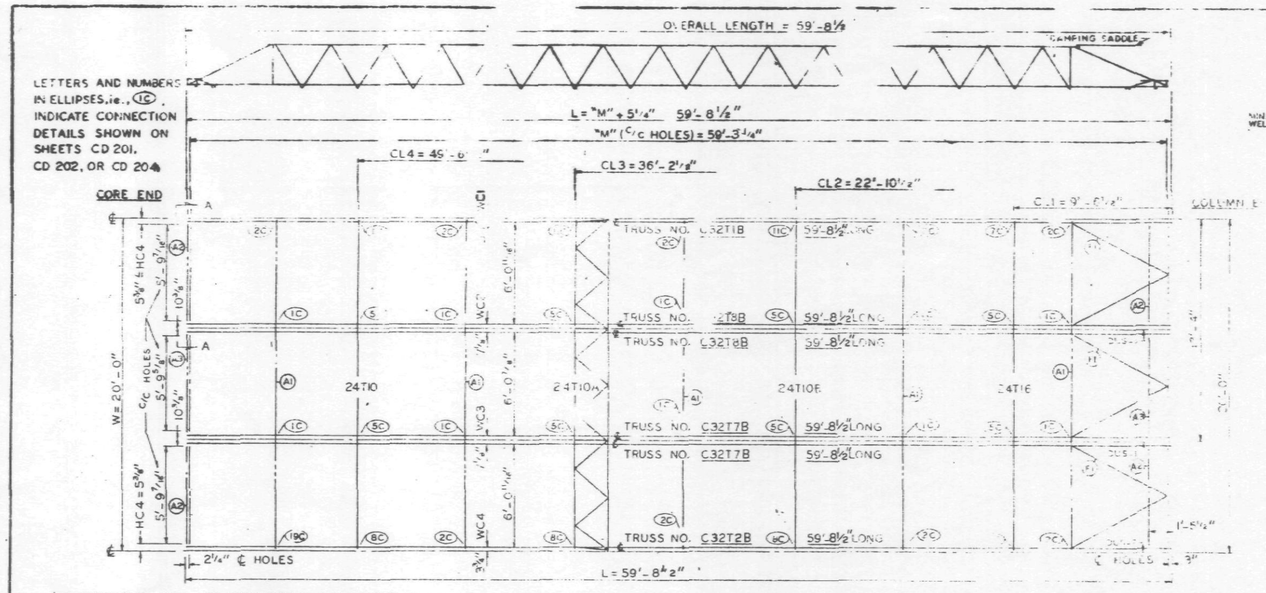


74 (N)

James White 11/5/68

LACLEDE STEEL CO.

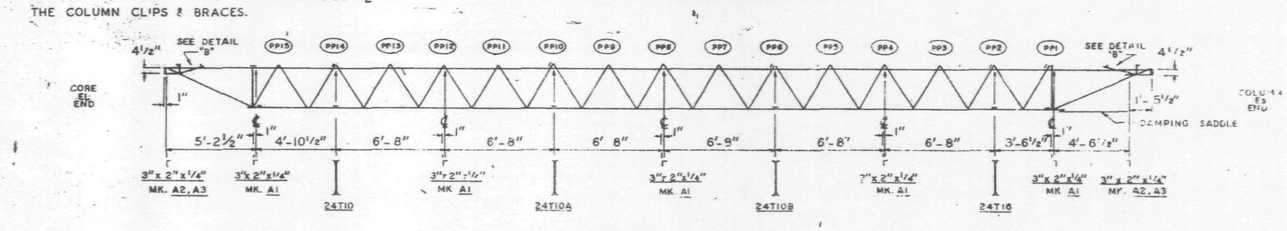
DATE OCT 31 1968

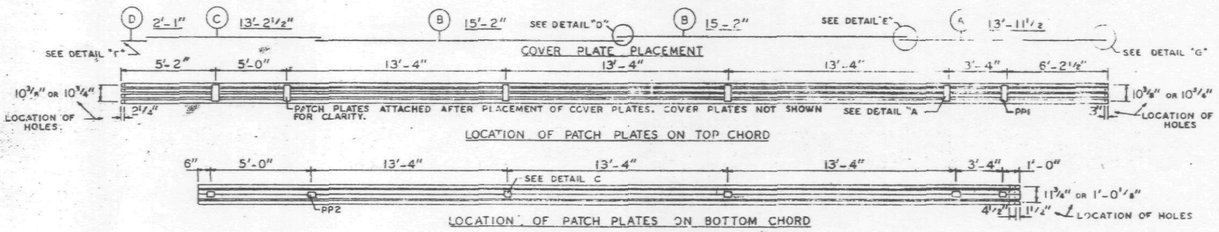


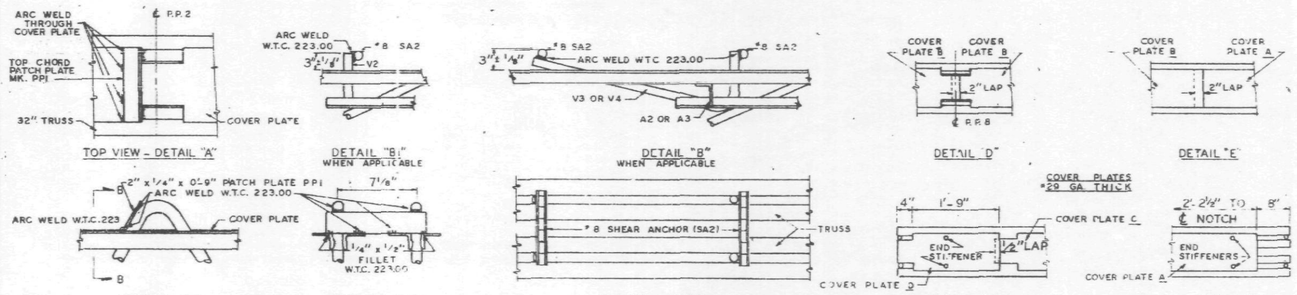
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

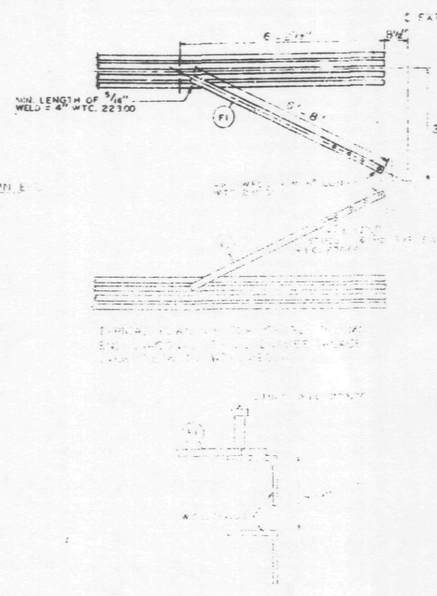
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

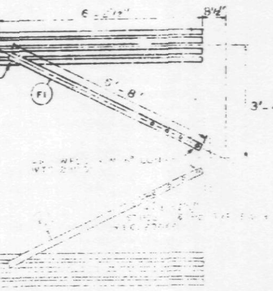
PANEL NO. D1B SIZE 20' x 59'-8½"



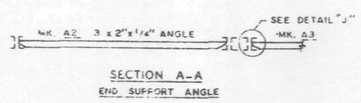




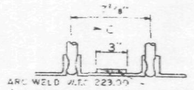




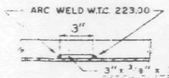
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	QTY.	SIZE	SPEC. & G.
FLOOR TRUSSES	T1B	1	C32T1B - 59'-8½"	ST 201B
	T2B	1	C32T2B - 59'-8½"	ST 202B
	T7B	2	C32T7B - 59'-8½"	ST 207B
	T8B	2	C32T8B - 59'-8½"	ST 208B
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 11"	ST 210A
	T10B	1	24T10B - 11"	ST 210B
	T16	1	24T16 - 11"	ST 216
	A1	4	3½" x 2" x 1/4" x 19'-1"	ST 36
ANGLE	A2	4	3" x 2" x 1/4" x [illegible]	ST 36
	A3	2	3" x 2" x 1/4" x [illegible]	ST 36
[illegible]	E	5	[illegible] x 8" x 0'-8"	ST 400
PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	16	4" x 1/4" x 0'-3"	ST 400
COVER PLATES	A	3	19" x 0.135" x 13'-11½"	ST 303
	B	5	19" x 0.135" x 15'-2"	ST 303
	C	3	19" x 0.135" x 13'-2½"	ST 303
	D	3	19" x 0.135" x 2'-11"	ST 303
[illegible]	CP1	[illegible]	2" x 1/2" x 1/4" x 0'-8"	ST 400
[illegible] ANCHOR BAR	SA2	12	⅝" REBAR x 0'-9"	ST 400
ANGLE	CA1	2	3½" x 3½" x 3/8" x 3'-6½"	ST 288
	CA1-B	1	3½" x 3½" x 3/8" x 3'-0⅛"	ST 288
[illegible] BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
	F1	4	3½" x 3½" x 1/2"	ST 400
CONNECTION PLATES	F2	1	4½" x 3/8" x 0'-9"	ST 400
	F3	1	4½" x 3/8" x 1'-0"	ST 400
	P4	3	6½" x 1/2" x 0'-8"	ST 400
	P5	1	4½" x 3/8" x 0'-9"	ST 401

NOTES: (1) ALL SHOP WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" MIN. THROAT FILLET.

REF. DRWGS.		
	7-A82-5 & 11	7-22-68
	7-A83-9	10-15-68
	7-A84- 3,1	1- 3-68
	7-A84-15,16 & 39	7-22-68
	7-A84-42 & 3	10-15-68
	SF-124	10-11-68
	7-381-2,3 & 4	7-22-68
	7-381-5	10-15-68

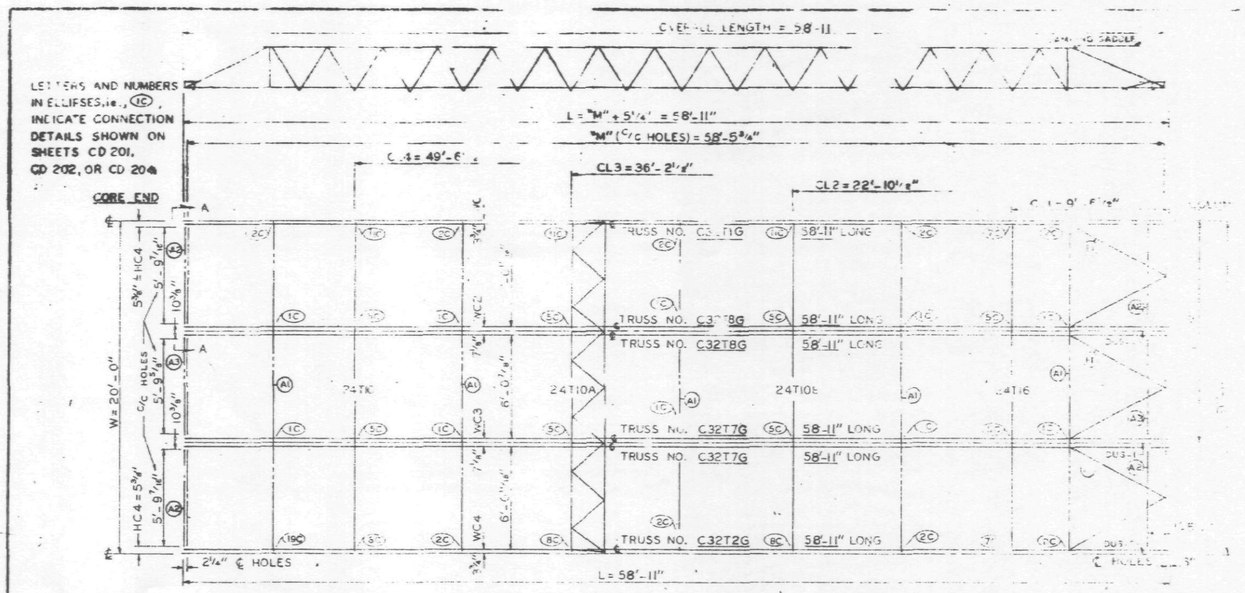
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 84-91, 93-106 (N)

PANEL D1B - 20' x 59'-8½"

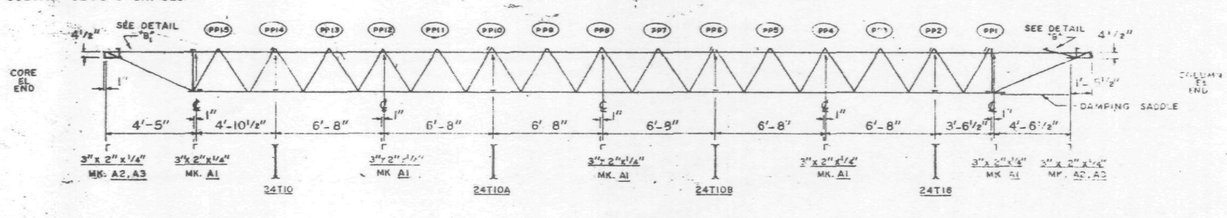
FABRICATION BY: LACLEDE STEEL COMPANY

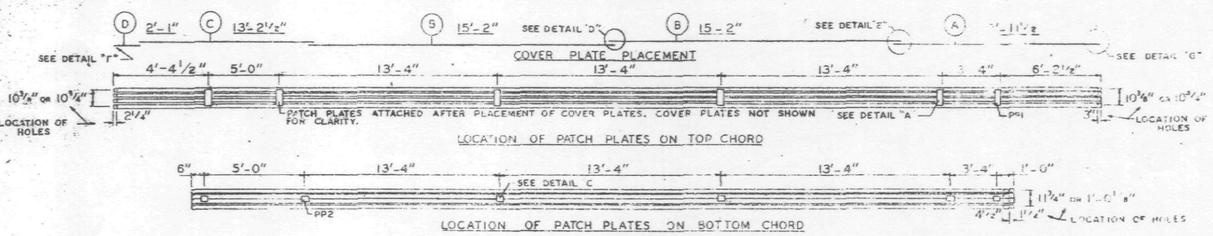
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-9 10-15-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 11/7/68	DRAWN BY gdc DATE OCT 24, 1968	
APPROVED FOR FABRICATION FOR FABRICATOR BY	DATE	CHECKED BY: T.M.CHURA DATE OCT. 24, 1968	IN CHARGE OF PROD. DEPT.
DETAILED BY A CARL WEBER		FABRICATION CONT. NO. WTC 221	SHEET NO. FP-D1B

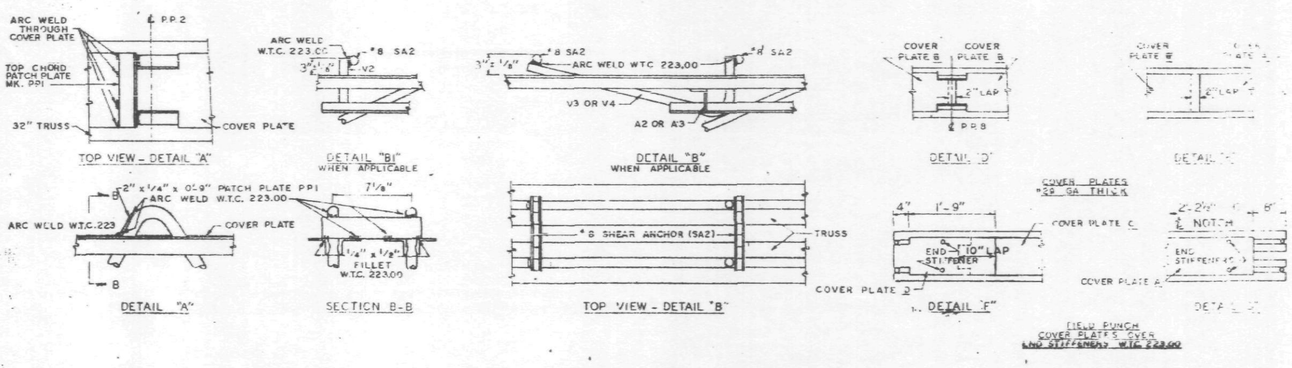


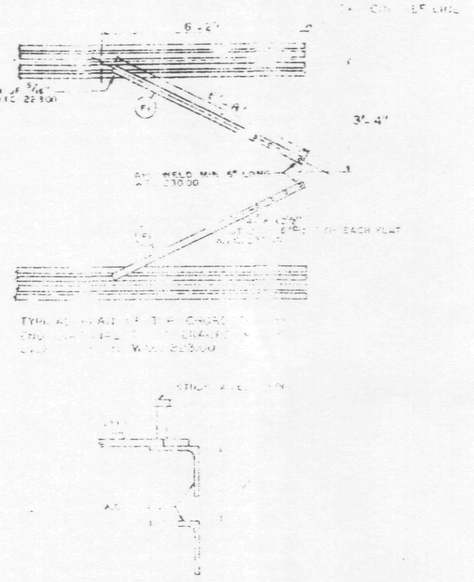
℄ & DIMENSION HC4 ARE RELATED TO HOLES CUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1G SIZE 20' x 58'-11"



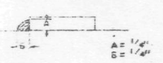


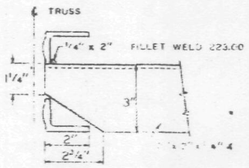


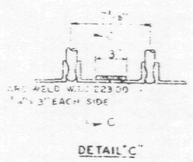


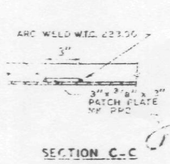
FLOOR TRUSSES	T1G	1	C32T1G - 58'-11"	ST 201G	
	T2G	1	C32T2G - 58'-11"	ST 202G	
	T7G	2	C32T7G - 58'-11"	ST 207G	
	T8G	2	C32T8G - 58'-11"	ST 208G	
BRIDGING TRUSSES	T1C	1	24T1C - 19'-11"	ST 21C	
	T10A	1	24T10A - 19'	ST 210A	
	T10B	1	24T10B - 19'	ST 210B	
	T			ST 20	
	T			ST 2	
	A2		8" x 4" x 5'-10"	403	
	A3		3" x 2" x 4" x 5'-11"	ST 400	
	F1	2	1" x 8" x 6'-6"	ST 400	
	FP1	18	2" x 4" x 0'-3"	ST 400	
	PP2	18	2" x 4" x 0'-3"	ST 400	
	A	3	8" x 4" x 13'-11 1/2"	ST 303	
	A	3	8" x 4" x 16'-2"	ST 303	
	A	3	8" x 4" x 13'-2 1/2"	ST 303	
	A	3	8" x 4" x 2'-1"	ST 303	
	SA2	9	1/2" x 4" x 0'-8"	ST 400	
	SA2	9	8" REBAR x 0'-9"	ST 400	
	A	4	3" x 3 1/2" x 3/8" x 3'-6 1/8"	ST 298	
	A	4	3" x 3 1/2" x 3/8" x 3'-6 1/8"	ST 298	
	C2	4	1" x 1" x 1'-3"	ST 400	
	C1	4	1" x 8" x 0'-10"	ST 400	
	A	4	3" x 3 1/2" x 3/8" x 5'-1 1/2"	ST 400	
	F2	1	4" x 3/8" x 0'-8"	ST 400	
	F3	1	4" x 3/8" x 1'-0"	ST 400	
	F4	1	4" x 3/8" x 0'-8"	ST 400	
	F5	1	4" x 3/8" x 1'-4"	ST 400	

CONNECTIONS IN ALL CROSS FRAMING EQUAL TO UNLESS OTHERWISE SHOWN ALL CONNECTION ARE WELDS TO BE 1/4" MIN. FILLET THROAT FILLET.









FIELD ERECTION DRAWINGS

1-AB2-5 & 11	7-22-68
1-AB2-2	10-15-68
1-AB4-3,1	1-3-68
1-AB4-15,16 & 39	7-22-68
1-AB4-42 & 3	10-15-68
SK-124	10-11-68
1-181-2,3 & 4	7-22-68
1-181-5	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N&S)

PANEL DIG - 20' x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE 11/7/68

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

DETAILED BY A. CARL WEBER

DESIGN DRAWING NO. 1-AB3-4 10-15-68

PLATE

DRAWN BY: g&c DATE OCT. 24, 1968

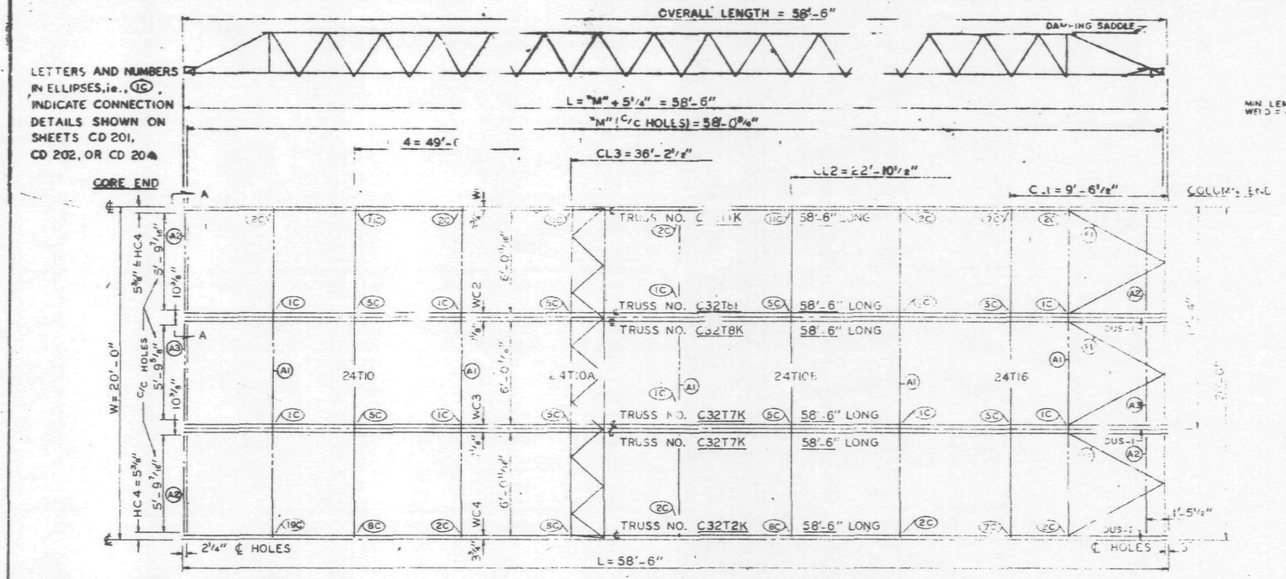
CHECKED BY: E.M. CHURA DATE OCT 24, 1968

IN CHARGE OF [illegible]

FABRICATION CONT NO. WTC 221

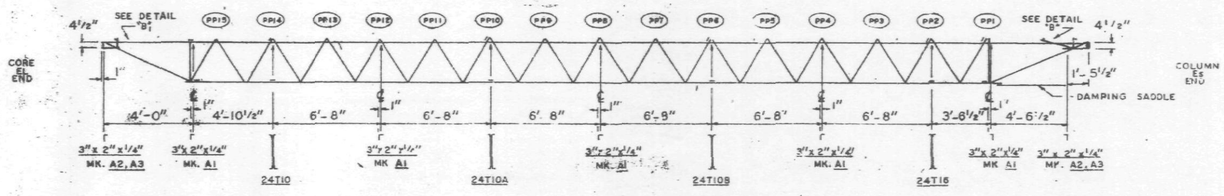
SHEET NO. [illegible]

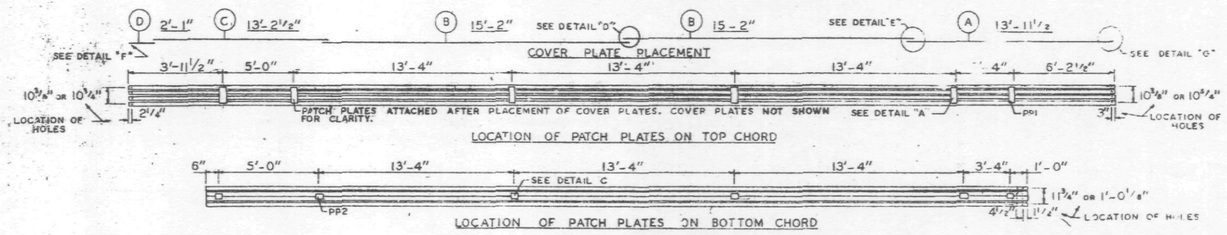
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

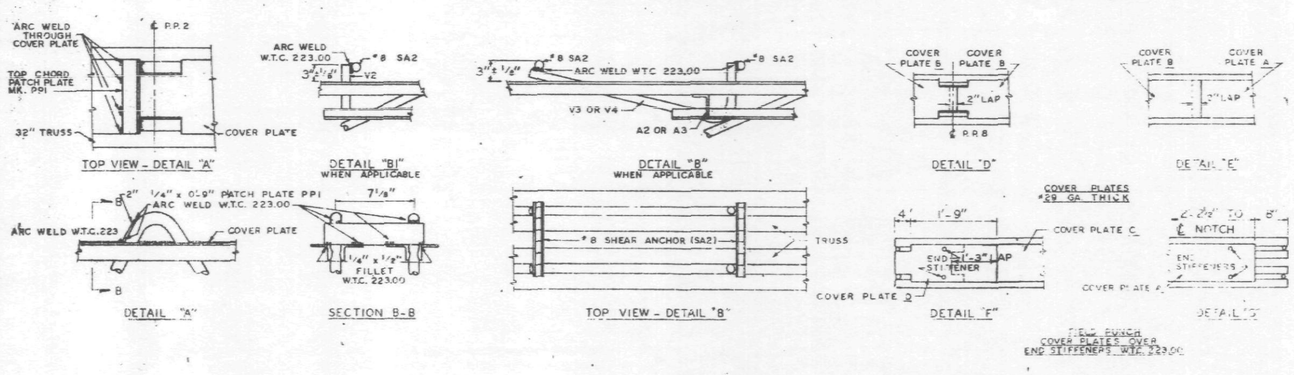


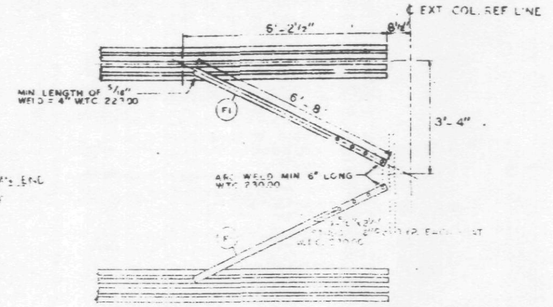
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

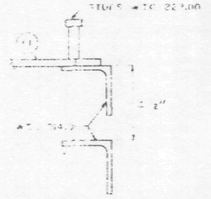
PANEL NO. D1K SIZE 20' x 58'-6"







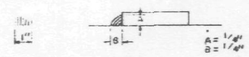


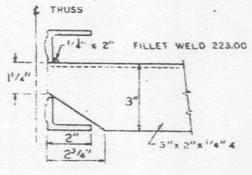


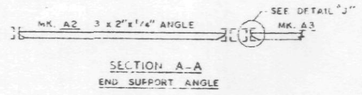
REQUIRED MATERIAL PER PANEL

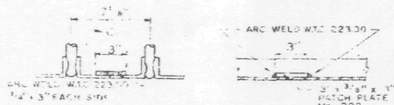
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T1K	1	C32T1K - 58'-6"	ST 201K
	T2K	1	C32T2K - 58'-6"	ST 202K
	T7K	2	C32T7K - 58'-6"	ST 207K
	T8K	2	C32T8K - 58'-6"	ST 208K
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - "	ST 210B
	T16	1	24T16 - "	ST 216
				ST
				ST 403
				ST 403
	PP	18	3" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 1/4" x 0'-3"	ST 400
			5" x 13-11 1/2"	ST 303
			x 15'-2"	ST 303
			x 13-2 1/2"	ST 303
			x 2'-1"	ST 303
	SA2	9	#8 REBAR x 0'-9"	ST 400
	SA3	2	3" x 3/16" x 3" x 3'-2 1/2"	ST 298
	SA4	1	3" x 4" x 3/16" x 3'-0 1/2"	ST 298
	SA1	4	ϕ x 1'-3"	ST 400
	SB4	8	ϕ x 0'-10"	ST 400
	B1	4	3" x 3/16" x 8 1/2"	ST 400
	P2	1	4" x 3/16" x 0'-9"	ST 400
	B3	1	4" x 3/16" x 1'-0"	ST 400
	P4	3	4" x 1/2" x 0'-6"	ST 400
	P4	1	4" x 39" x 0'-9"	ST 401

MATERIAL TO BE MADE WITH LOW HYDROGEN RODS IN 7018 E70 SERIES OR EQUAL.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARE WELDED TO BE 1/4" FULL THROAT FILLET.









REF. DRWGS.

7-A82-5 & 11	7-22-68
7-A83-9	10-15-68
7-A84-3,1	1-3-68
7-A84-15,16 & 39	7-22-68
7-A84-42 & 3	10-15-68
SP-124	10-11-68
7-A81-2,3 & 4	7-22-68
7-A81-5	10-15-68

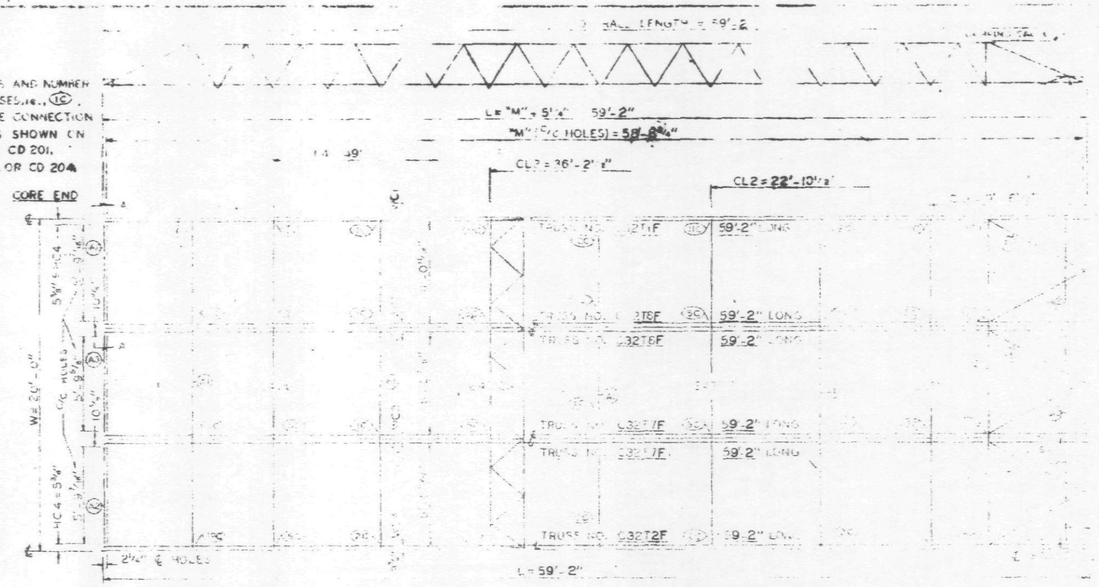
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46 (N)

PANEL D1K - 20' x 58'-6"

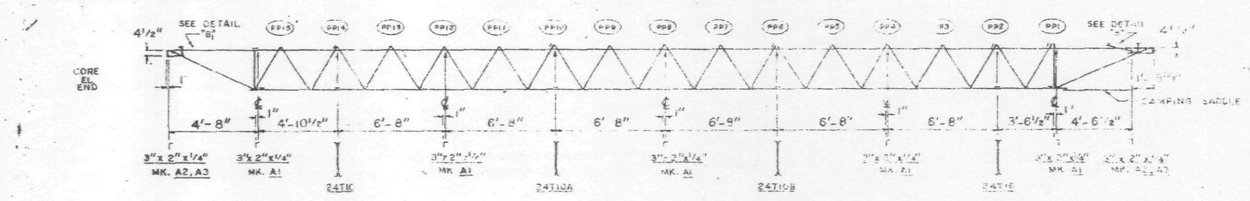
DESIGN BY LACLEDE STEEL COMPANY
FABRICATED ST. MARIE, ILLINOIS
ERECTED
APPROVED FOR FABRICATION BY THE FABRICATOR
DATE 11/7/68
DETAILED BY A. CARL WEBER
DESIGN DRAWING NO. 7-A83-9 10-15-68
DRAWN BY
DATE OCT. 24, 1968
CHECKED BY T.M. CALKINS
DATE OCT. 24, 1968
FABRICATION CONT. NO. WTC 221
PLATE
IN CHARGE OF PROD. DEPT.
SHEET NO. FP D1K

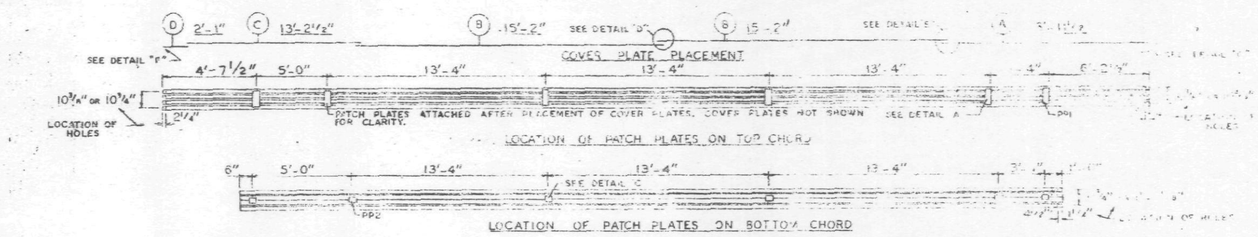
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

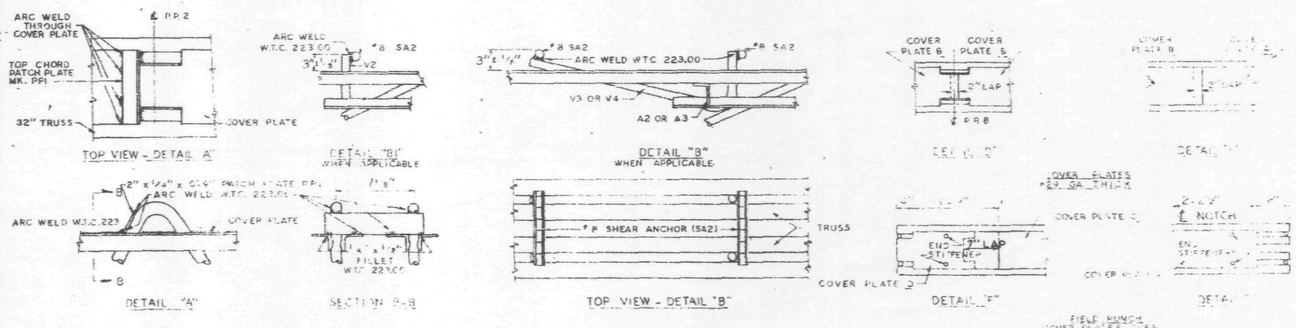


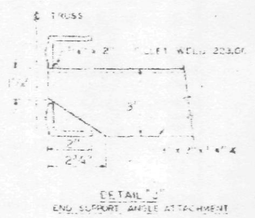
℄ & DIMENSION HC4 ARE RELATED TO HOLES USED IN BEARING END OF FLOOR TRUSSES WHICH ARE SHOWN WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. 1F SIZE 20' x 59'-2"



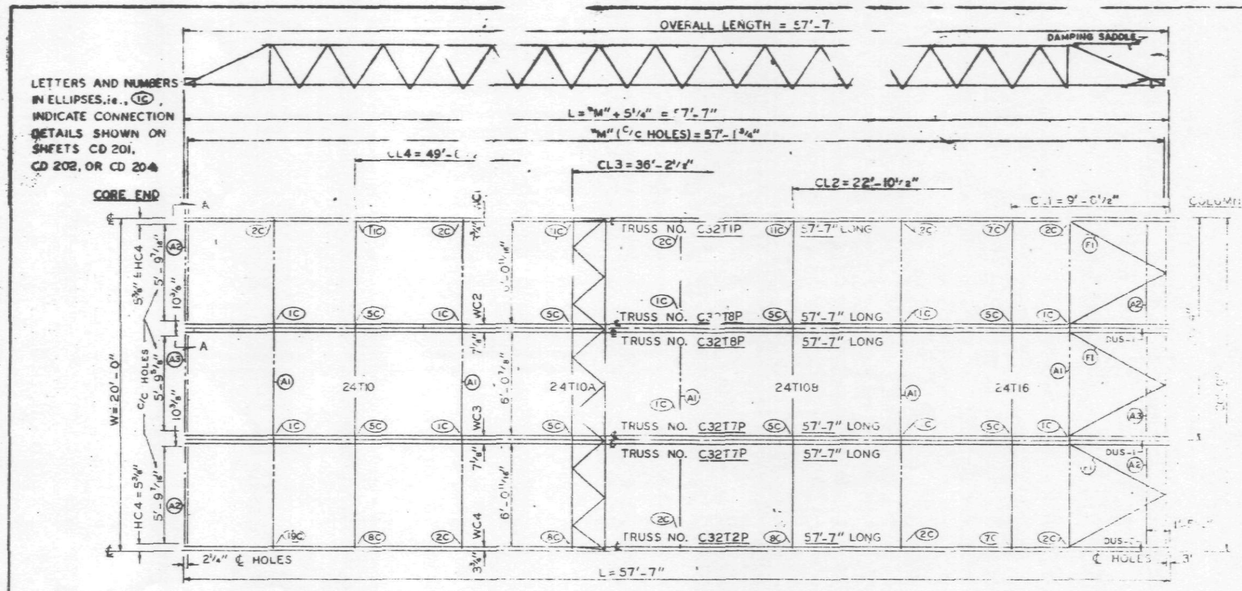






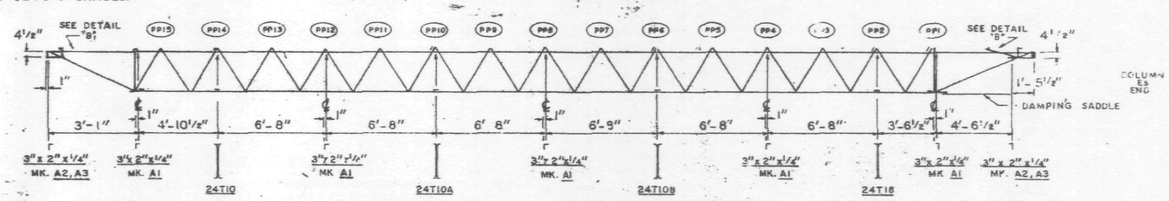
	1F	1	C32T1F - 59'-2"	ST 201F
	2F	1	C32T2F - 59'-2"	ST 202F
	3F	2	C32T3F - 59'-2"	ST 207F
	4F	2	C32T4F - 59'-2"	ST 208F
	T10	1	24T10 - 19' 11"	ST 210
	T10A		24T10 - "	ST 210A
				ST 9B

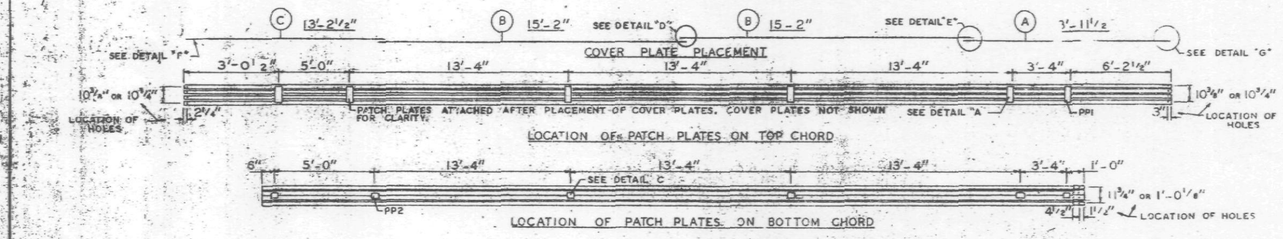
				ST 201F
				ST 202F
				ST 207F
				ST 208F
				ST 210

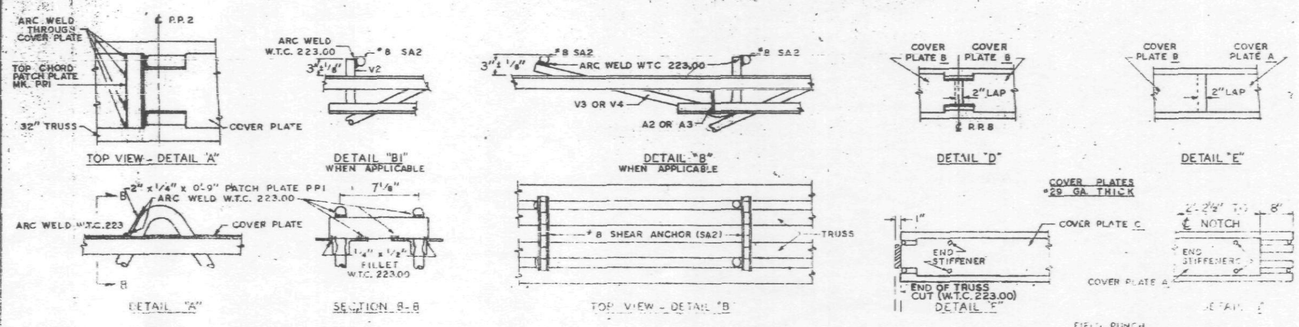


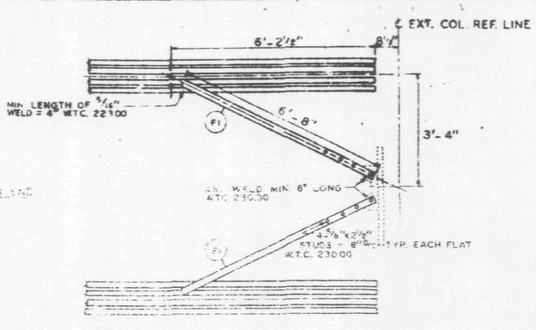
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1P SIZE 20' x 57'-7"

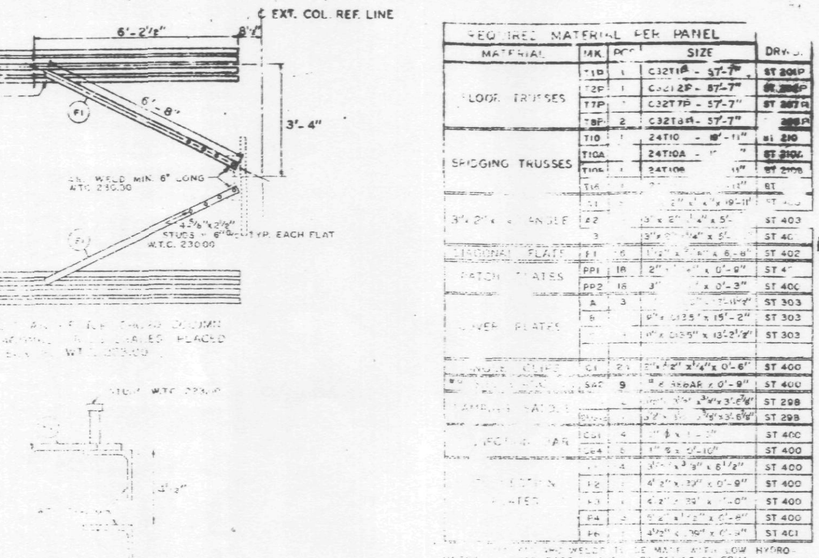








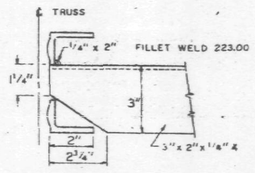
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



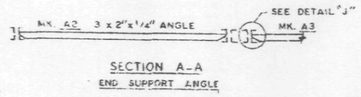
REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	DRWG.
FLOOR TRUSSES	T1D	1	C32T1P - 57'-7"	ST 201P
	T2P	1	C32T2P - 57'-7"	ST 202P
	T7P	1	C32T7P - 57'-7"	ST 207P
	T8F	2	C32T8P - 57'-7"	ST 208P
SPLICING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - " "	ST 210A
	T10B	1	24T10B - " "	ST 210B
	T16	1	24T16 - " "	ST
	S1	2	[illegible] x 19'-11"	ST
3" x 2" x ¼" ANGLE	A2	2	3" x 2" x ¼" x 5'-	ST 403
	3	2	3" x 2" x ¼" x 5'-	ST 40
DIAGONAL PLATE	P1	16	11" x 4" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 0'-9"	ST 4
	PP2	18	3" x 0'-3"	ST 40
COVER PLATES	A	3	9" x 0'-11 1/2"	ST 303
	B	2	9" x 0'-2.5" x 15'-2"	ST 303
	C	1	1'-0" x 0'-2.5" x 13'-2 1/2"	ST 303
ANGLE CLIP	C1	2	3" x 2" x 1/4" x 0'-6"	ST 400
	SA2	9	[illegible] x 0'-9"	ST 400
[illegible] PLATE	[illegible]	[illegible]	3/4" x 3" x 3'-6 1/8"	ST 298
[illegible] BAR	[illegible]	[illegible]	3/4" x 3" x 3'-6 1/8"	ST 298
[illegible]	[illegible]	[illegible]	1/4" x [illegible]	ST 400
[illegible]	[illegible]	[illegible]	1/4" x 5'-10"	ST 400
[illegible]	[illegible]	[illegible]	3/4" x 3" x 6 1/2"	ST 400
[illegible]	[illegible]	[illegible]	4" x 3" x 0'-9"	ST 400
[illegible]	[illegible]	[illegible]	4" x 3" x 1'-0"	ST 400
	P4	2	5" x 4 1/2" x 0'-8"	ST 400
	P5	2	4 1/2" x 10" x 0'-8"	ST 401

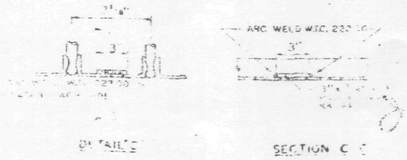
ALL WELDS TO BE MADE WITH LOW HYDRO[illegible] UNLESS OTHERWISE SHOWN. ALL CONNECTION ARC WELDS TO BE 5/16" x 1" LONG THROAT FILLET.



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL "I"

SECTION C-C

R.E. DRWGS.

7-A92-5 & 11	7-22-68
7-A83-9	10-15-68
7-A84-3,1	1-3-68
7-A84-15,16 & 39	7-22-68
7-A84-42 & 3	10-15-68
56-124	10-11-68
7-381-2,3 & 4	7-22-68
7-381-5	10-15-68

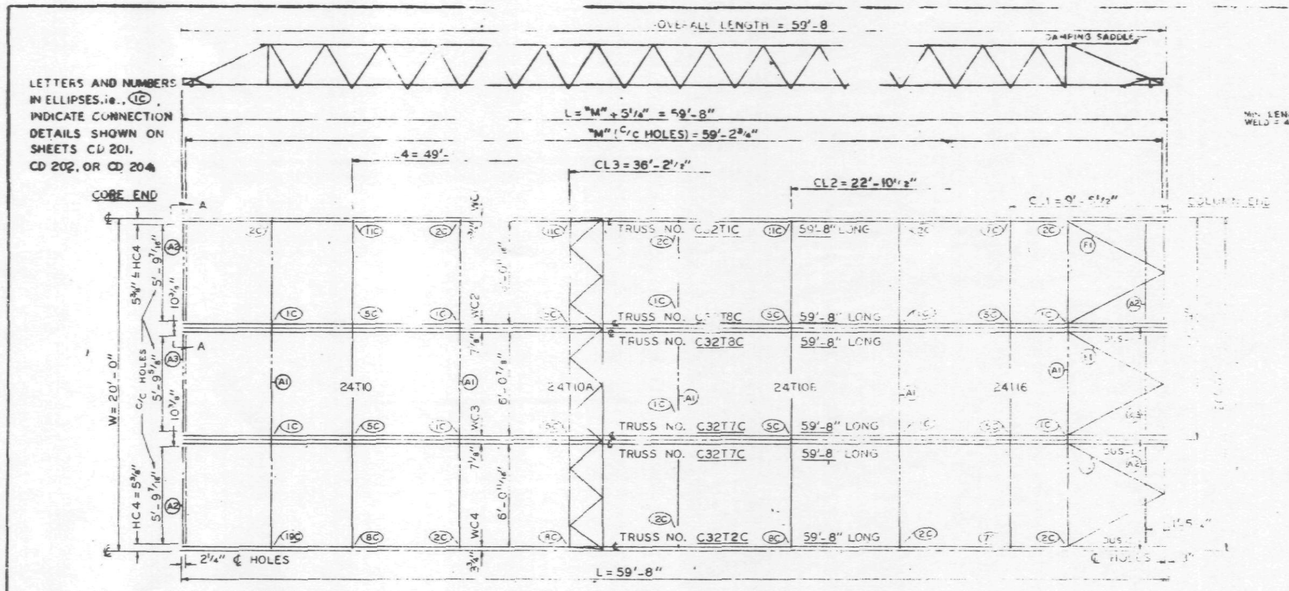
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 74 (N)

PANEL D1P - 20' x 57'-7"

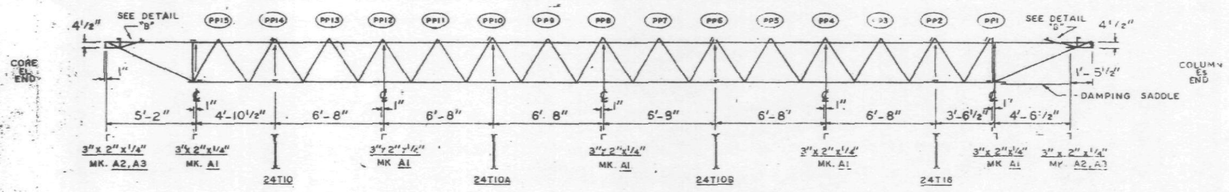
11/7/68

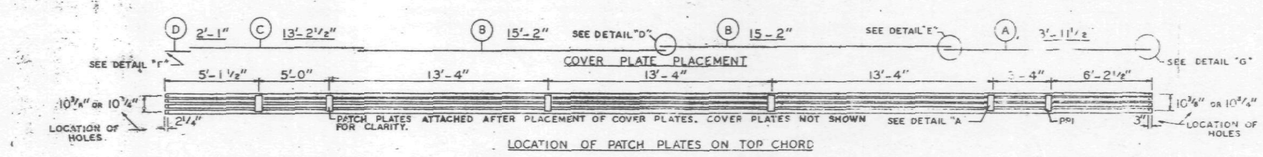
SHEET NO. 1
FP D1P



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

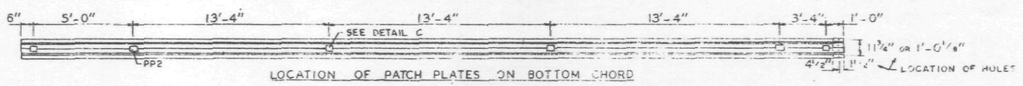
PANEL NO. DIC SIZE 20' x 59'-8"



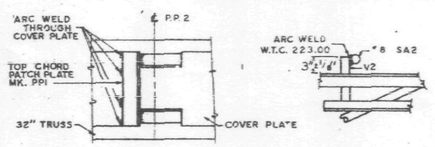


COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

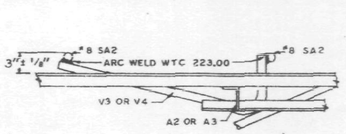


LOCATION OF PATCH PLATES ON BOTTOM CHORD

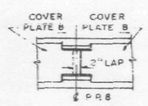


TOP VIEW - DETAIL "A"

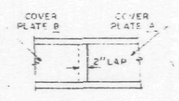
DETAIL "B1" WHEN APPLICABLE



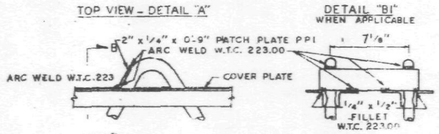
DETAIL "B" WHEN APPLICABLE



DETAIL "D"

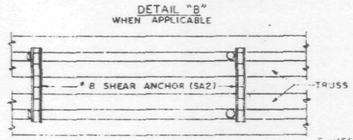


DETAIL "E"



DETAIL "A"

SECTION B-B



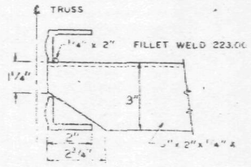
TOP VIEW - DETAIL "B"

DETAIL "F" DETAIL "G"

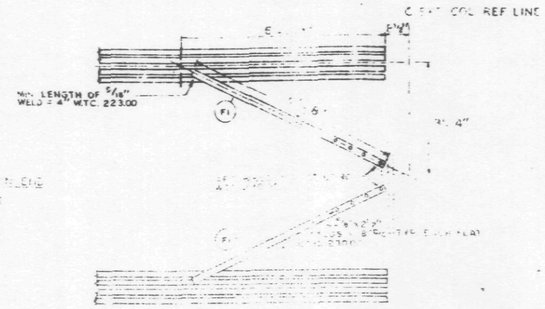
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

SECTION A-A
END SUPPORT ANGLE

DETAIL "C" SECTION C-C



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



CLIP ANGLE LOCATION FOR DIAGONAL PLATE 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T1C	1	C32T1C - 59'-8"	ST 201C
	T7C	1	C32T2C - 59'-8"	ST 202C
	T7C	2	C32T7C - 59'-8"	ST 207C
	T8C	2	C32T8C - 59'-8"	ST 208C
BRIDGING, TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - " "	ST 210A
	T10B	1	24T10B - " "	ST 210B
	T16	1	24T16 - 19'-8 1/2"	ST 216
ANGLES	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-0"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-0"	ST 403
COVER PLATES	F1	6	11'-2" x 3 7/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	15	3" x 1/4" x 0'-3"	ST 400
COVER PLATES	A	3	24" x .1345" x 19'-11 1/2"	ST 303
	B	1	9" x .1345" x 19'-2"	ST 303
	C	3	6" x .1345" x 13'-2 1/2"	ST 303
	D	3	9" x .1345" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 2" x 2" x 1/4" x 0'-8"	ST 400
REINF. SHEETS AT C	SA2	12	#8 REBAR x 0'-9"	ST 400
AMPLIFIED SAFETY CHAIN	DAS-1	2	3" x 3" x 1/4" x 3'-8 1/4"	ST 298
	DAS-2	1	3" x 3" x 1/4" x 3'-8 1/4"	ST 298
FRICTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3" x 3/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .38" x 0'-9"	ST 401

NOTES: (1) ALL SMC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

P. F. DRWGS.

7-A82-5 & 11	7-22-68
7-A83-9	10-15-68
7-A84-3,1	1-3-68
7-A84-15,16 & 39	7-22-68
7-A84-42 & 3	10-15-68
S/-124	10-11-68
7-A81-2,3 & 4	7-22-68
7-A81-5	10-15-68

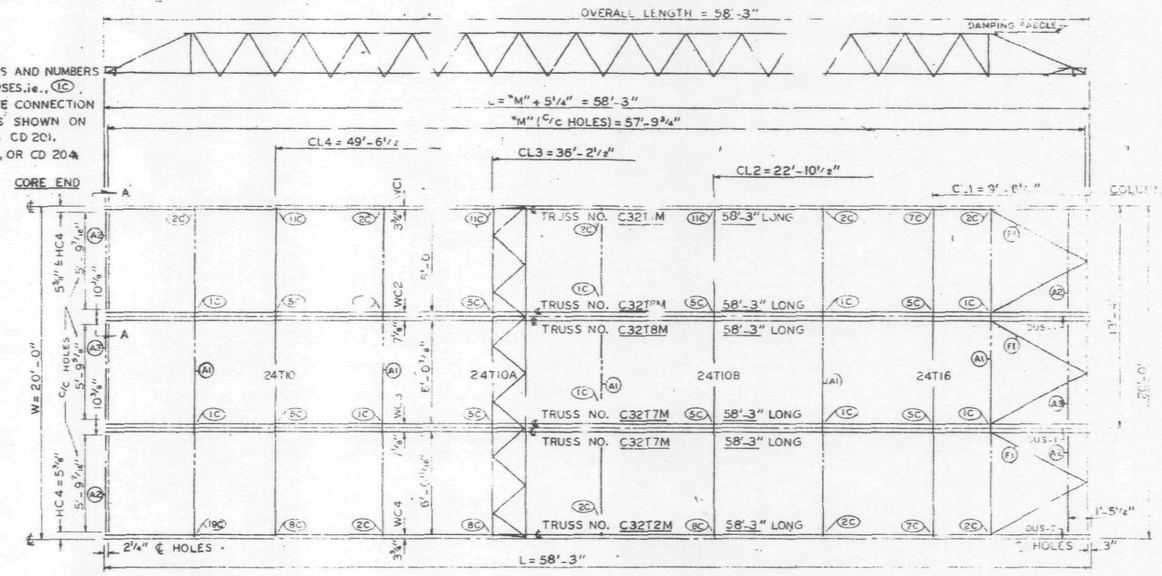
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91 & 93-106 (S)
PANEL DIC - 20' x 59'-8"

[illegible] EAGLE IRON COMPANY

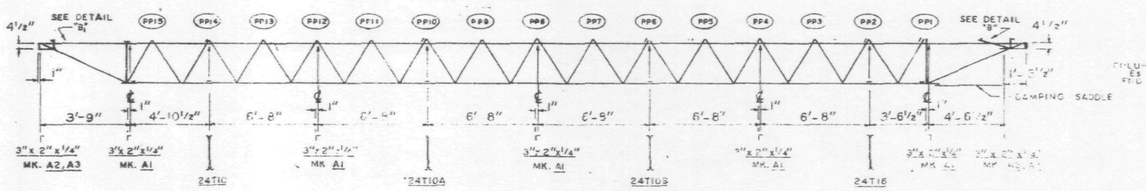
[illegible]		DESIGN DRAWING NO. 7-A82-5	10-15-68	PLATE
[illegible] FOR FABRICATION	DATE 11/7/68	DRAWN BY [illegible]	
APPROVED FOR FABRICATION	DATE	CHECKED BY TM CHMURA	IN CHARGE OF
BY [illegible] FOR FABRICATOR		DATE OCT 24, 1968	PROD. DEV.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP DIC

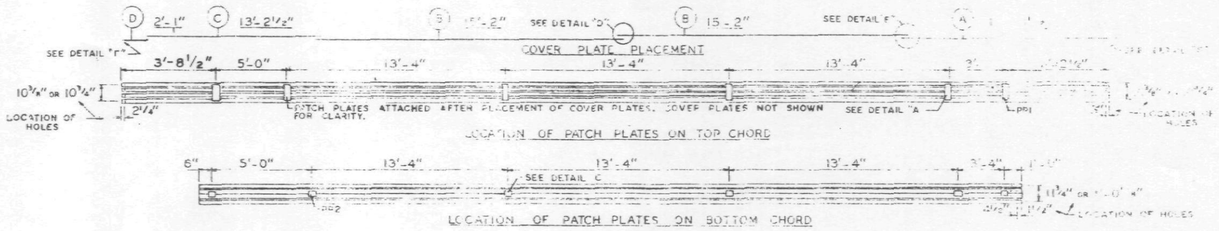
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIM SIZE 20' x 58'-3"

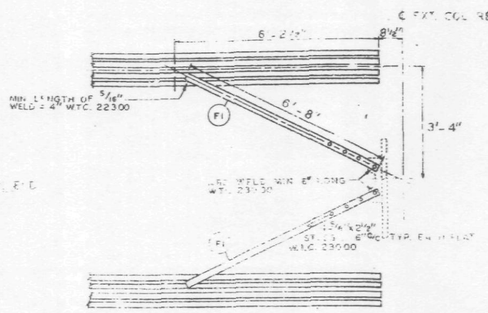




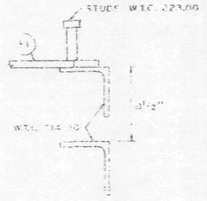
COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD



TYPICAL PLAN OF TOP CHORD COLUMN AND DIAGONAL TRUSS BRACES PLACED WITH RESPECT TO W.T.C. 223.00

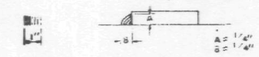


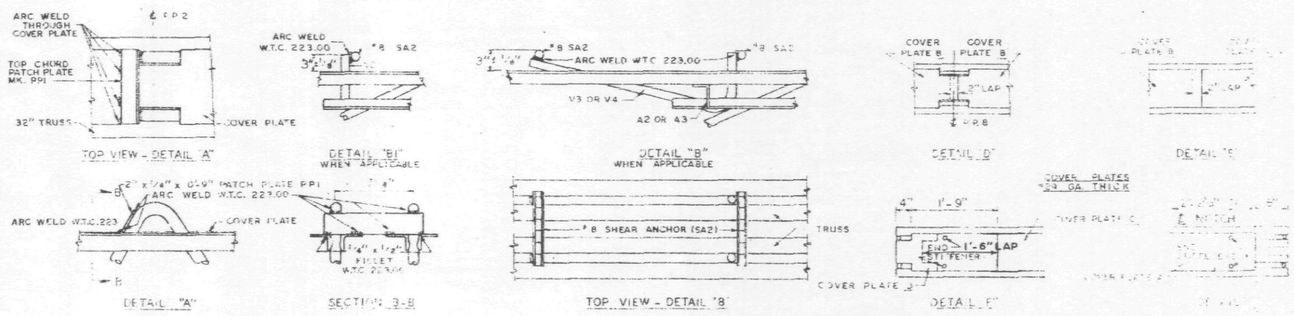
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

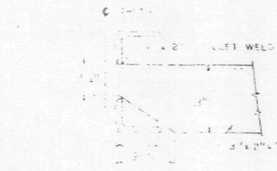
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1M	1	C32T1M - 58'-3"	ST 201M
	T2M	1	C32T2M - 58'-3"	ST 202M
	T7M	2	C32T7M - 58'-3"	ST 207M
	T8M	2	C32T8M - 58'-3"	ST 208M
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-1"	ST 210A
	T10B	1	24T10B - 19'-1"	ST 210B
	T16	1	24T16 - 19'-1"	ST 216
	L1	3	3" x 2" x 1/4" x 5'-11 7/8"	ST 401
DIAGONAL ANGLES	A2	4	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
DIAGONAL FLATS	F1	4	11'-2" x 3/8" x 2'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-6"	ST 400
	PP2	16	2" x 1/4" x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0'-10 1/2"	ST 303
	B	2	9" x .0135" x 15'-2"	ST 303
	C	1	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	CL	24	2" x 2" x 1/4" x 0'-8"	ST 400
⅞ SHEAR ANCHOR	SA21	9	⅞ ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	D1	1	5/16" x 1 1/2" x 3'-6 1/2"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 1/4" x 3'-6 1/2"	ST 298
[illegible] BAR	CB1	1	1" ø x 1'-3"	ST 400
	CB4	1	1" ø x 0'-10"	ST 400
CONNECTION PLATES	F1	4	3 1/2" x 3 1/8" x 6 1/2"	ST 400
	PB	1	4'-3" x 7/8" x 0'-6"	ST 400
	B3	1	4 1/2" x .36" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/4" x 0'-8"	ST 400
	P8	1	4 1/2" x .75" x 0'-9"	ST 401

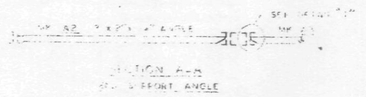
NOTES: (1) ALL SPECIFICATIONS OF MATERIAL WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





END STIFFENER WITH CLIP





A62-5 & 11	7-22-68
A83-7	10-15-68
A84-3	7-22-68
A84-15, 16 & 39	7-22-68
A84-42 & 43	10-15-68
[illegible]	10-11-68
[illegible] 3 & 4	7-22-68
[illegible]	10-15-68

PORT AUTHORITY

72-73 (N)

PANEL DIM - 20' 58'-3"

COMPANY

DRAWN 10-15-68

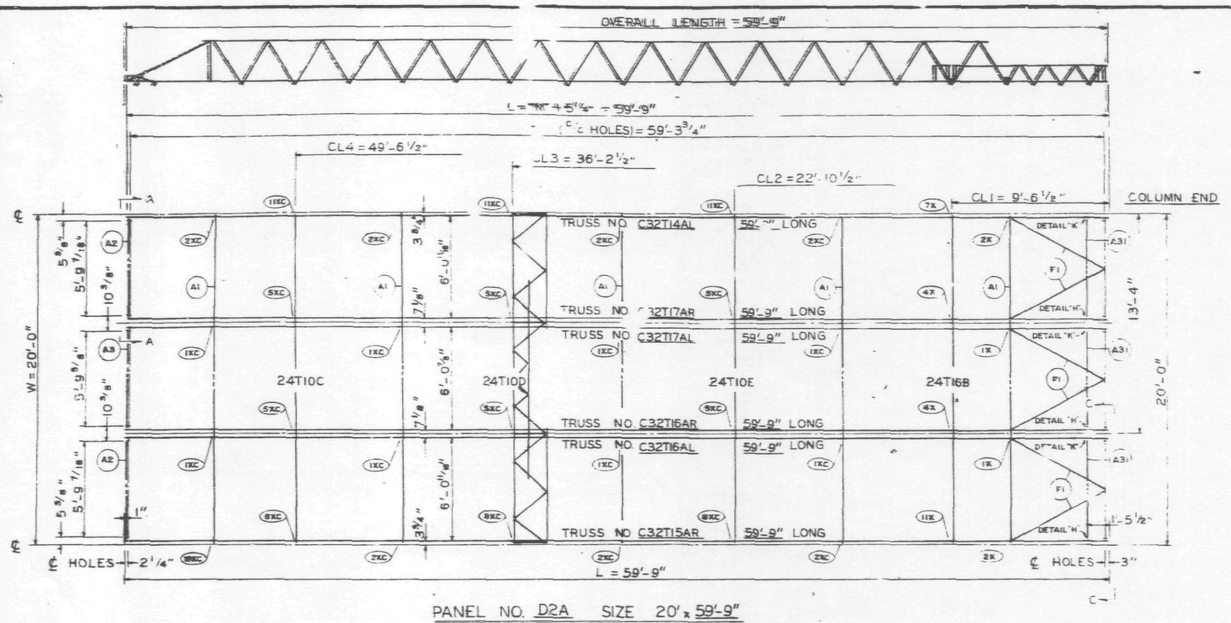
DATE 11/7/68 BY [illegible]

DATE OCT 24, 1968 BY T.W. LINA

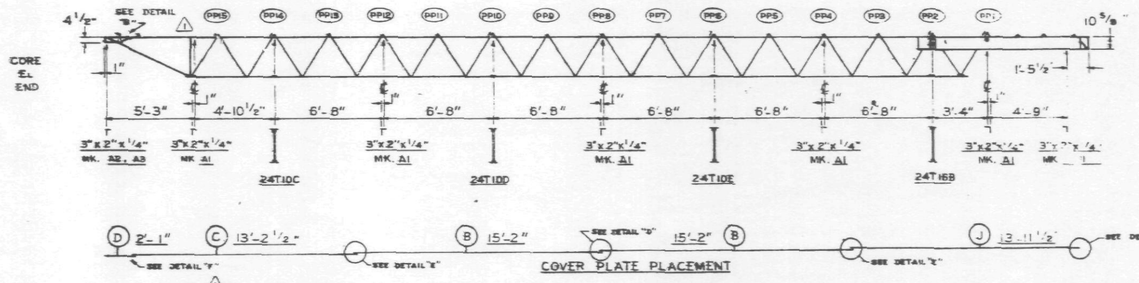
SUBSTITUTION CONT. NO.

PP1

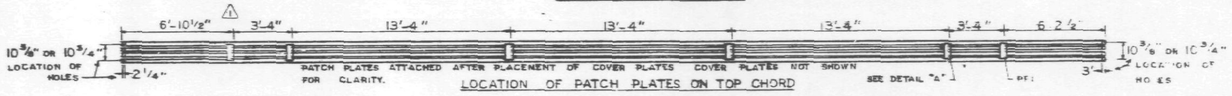
TOP DIM



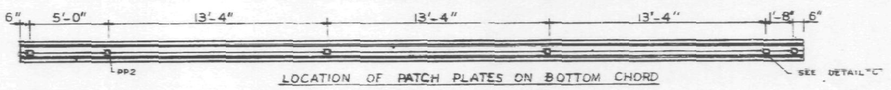
PANEL NO. D2A SIZE 20' x 59'-9"



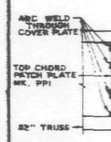
COVER PLATE PLACEMENT



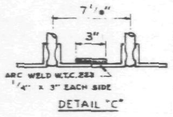
LOCATION OF PATCH PLATES ON TOP CHORD



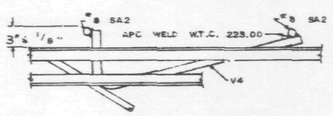
LOCATION OF PATCH PLATES ON BOTTOM CHORD



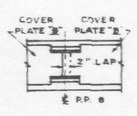
TOP VIEW - DETAIL "A"



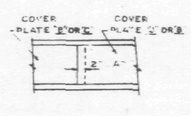
DETAIL "C"



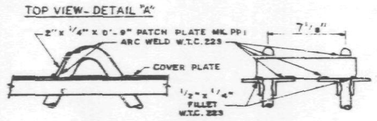
DETAIL "B"



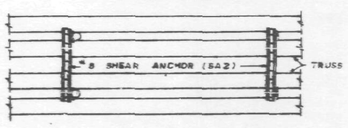
DETAIL "D"



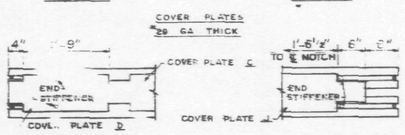
DETAIL "E"



DETAIL "A" SECTION B-B

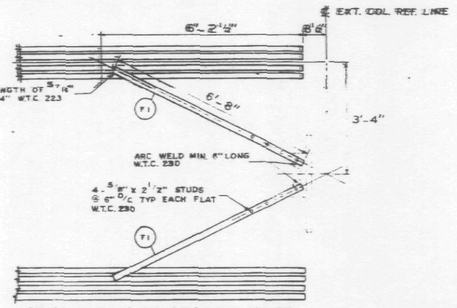


TOP VIEW DETAIL "B"

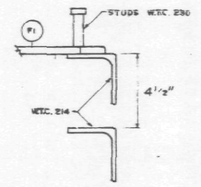


DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



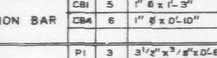
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

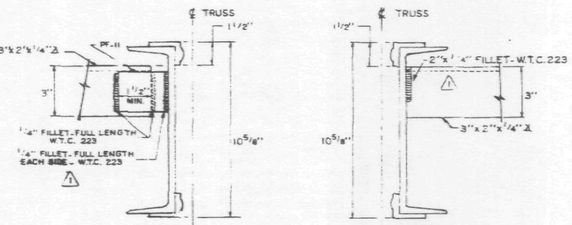


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14AL	1	C32T14AL x 59'-9"	ST 214AL
	T15AR	1	C32T15AR x 59'-9"	ST 215AL
	T16AL	1	C32T16AL x 59'-9"	16AL
	T16AR	1	C32T16AR x 59'-9"	
	T17AL	1	C32T17AL x 59'-9"	ST 217AL
	T17AR	1	C32T17AR x 59'-9"	
BRIDGING TRUSSES	T10C	1	24T10C x 19'-11"	ST 210C
	T10D	1	24T10D x 19'-11"	ST 210
	T10E	1	24T10E x 19'-11"	ST 210E
	T16B	1	24T16B x 19'-11"	ST 216B
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-	ST 403
	A2	2	3"x 2"x 1/4" x 5'-	ST 403
	A3	1	3"x 2"x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	24	2" x 1 2" x .25" x 6"	ST 400
"8 SHEAR ANCHOR	SA2	6	"8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" 8 x 1'-3"	ST 400
	CB4	6	1" 8 x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

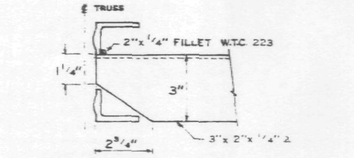




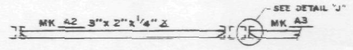
DETAIL "K" END SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	BDC

REF DRWG.

7-AB3-30	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SA-124	10-17-66

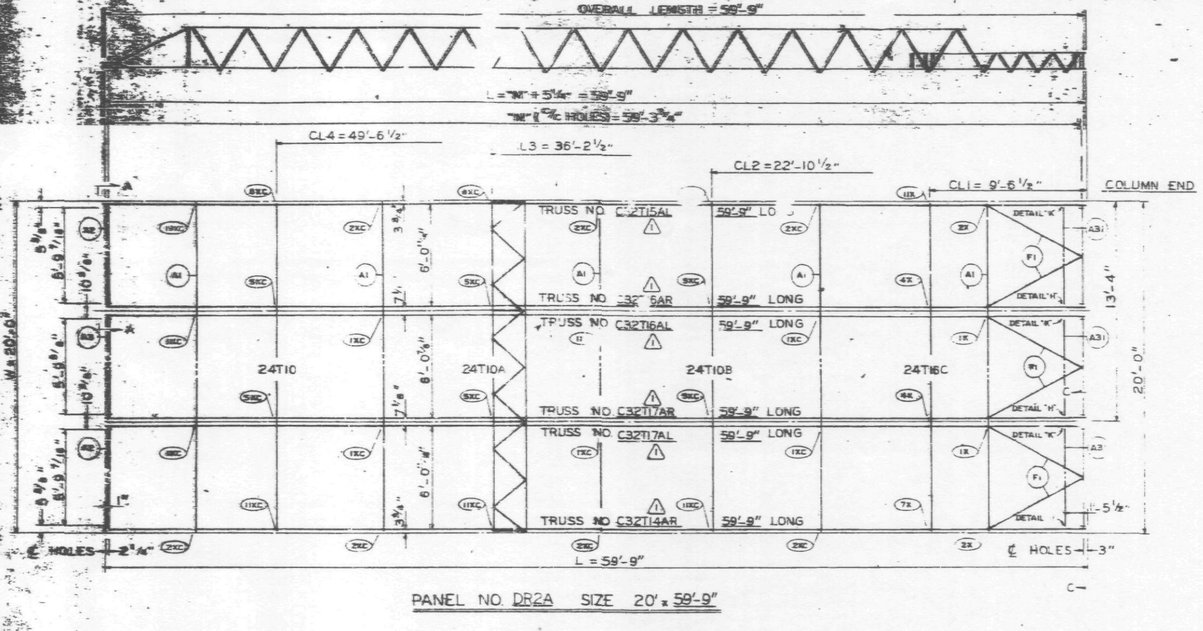
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

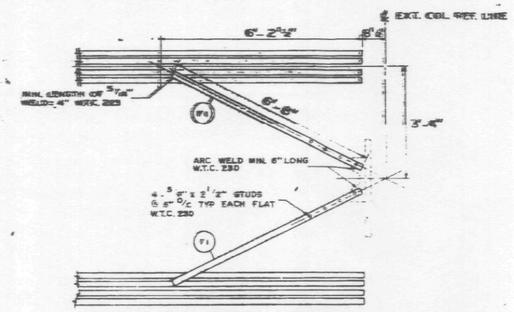
PANEL D2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

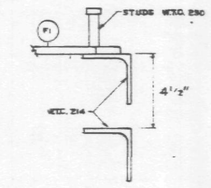
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-30	PLATE
APPROVED FOR FABRICATION BY _____ FOR P.O.N.Y.A.	DATE 2/25/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY _____ FOR FABRICATOR	DATE	CHECKED BY T.N. CHUBA DATE DEC. 5, 1968	IN CHARGE OF PROJ. ENG.
DETAIL [illegible]		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP D2A



PANEL NO. DR2A SIZE 20' x 59'-9"



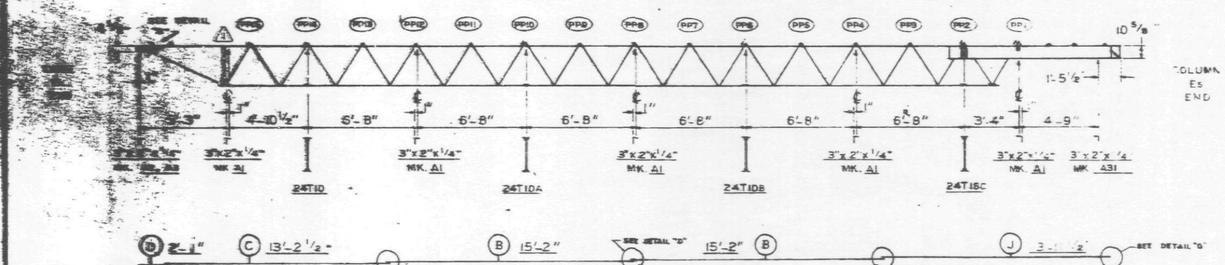
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

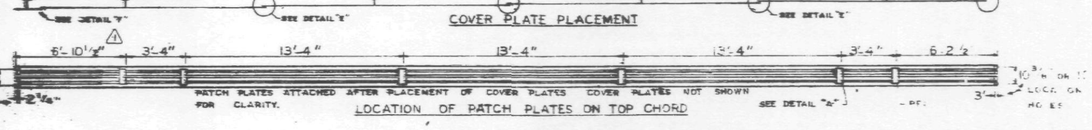


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES				
BRIDGING TRUSSES	T1D	1	24T1D x 19'-11"	ST 210C
	T1DA	1	24T1DA x 19'-11"	ST 210D
	T1DB	1	24T1DB x 19'-11"	ST 210E
	T1BC	1	24T1BC x 19'-11"	ST 68
3"x 2"x 1/4" ANGLE	A1	5	3"x2"x1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x [illegible] 3/4"	ST 403
	A31	3	3"x 2"x 1/4" x 8'-8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1'-4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	11 1/2" x 3 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-8"	ST 400
	PP2	18	3" x 3'-6" x 0'-1"	ST 400
COVER PLATES	B	6	5/16" x .0135" x 15'-2"	ST 303
	C	3	5/16" x .0135" x 13'-2 1/2"	ST 303
	D	3	5/16" x .0135" x 2'-1"	ST 303
	J	3	5/16" x .0135" x 13'-8 1/2"	ST 304
ANGLE CLIPS	C1	24	2" x 1 1/2" x 2 5/8" x 6"	ST 402
"B SHEAR ANCHOR	SA2	6	"B REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3 1/8" x 0'-8 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .39" x 0'-3"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

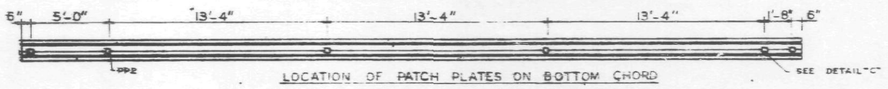
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (D).
ALL CONNECTION DETAILS FOR FLOORS 25, 58 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



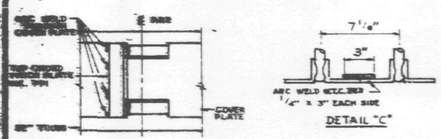


COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD



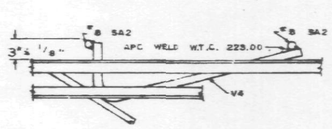
LOCATION OF PATCH PLATES ON BOTTOM CHORD



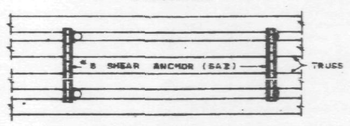
DETAIL "A"

DETAIL "C"

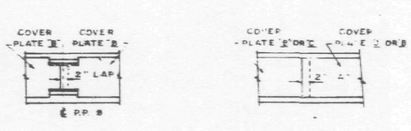
SECTION B-B



DETAIL "B"

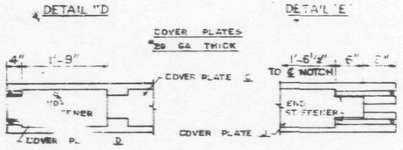


TOP VIEW DETAIL "B"



DETAIL "D"

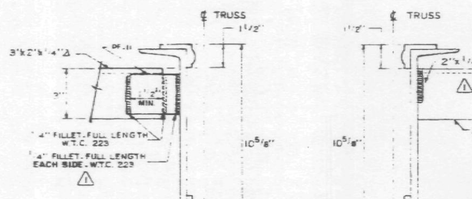
DETAIL "E"



DETAIL "F"

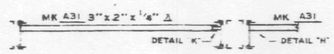
DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

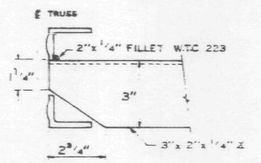


DETAIL K
END SUPPORT ANGLE ATTACHMENT

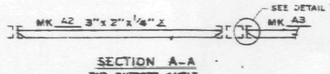
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	GDC

REF DRWG.

7-AB3-31	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 18	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
56-124	10-11-68

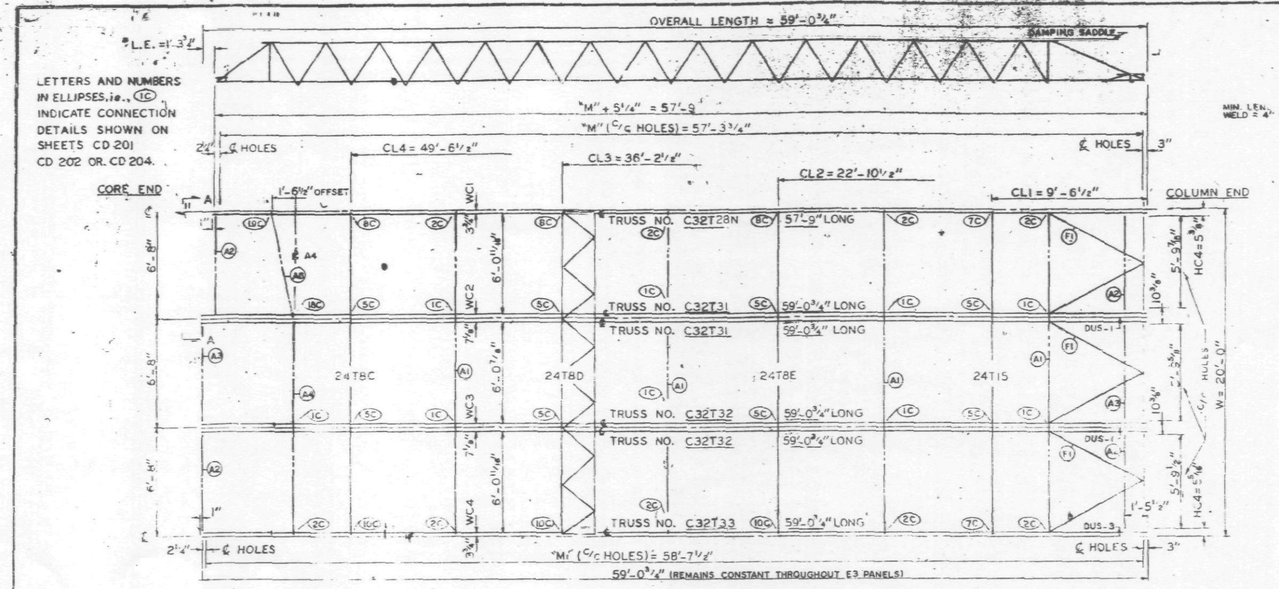
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL DR2A - 20' x 59'-9"

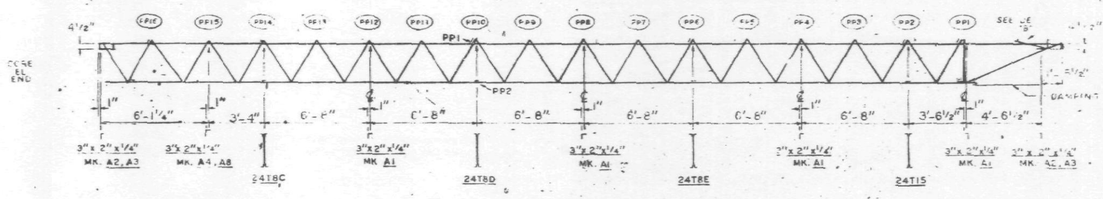
FABRICATION BY LACLEDE STEEL COMPANY

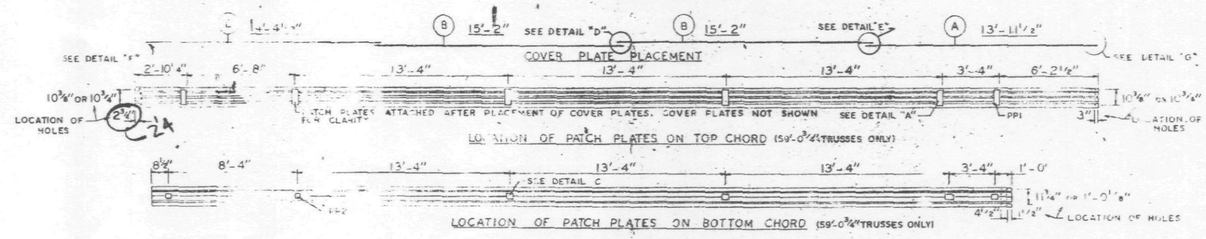
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-31	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 2/20/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY [illegible] DATE DEC. 5, 1968	
DETAILED BY [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO. CD DR2A

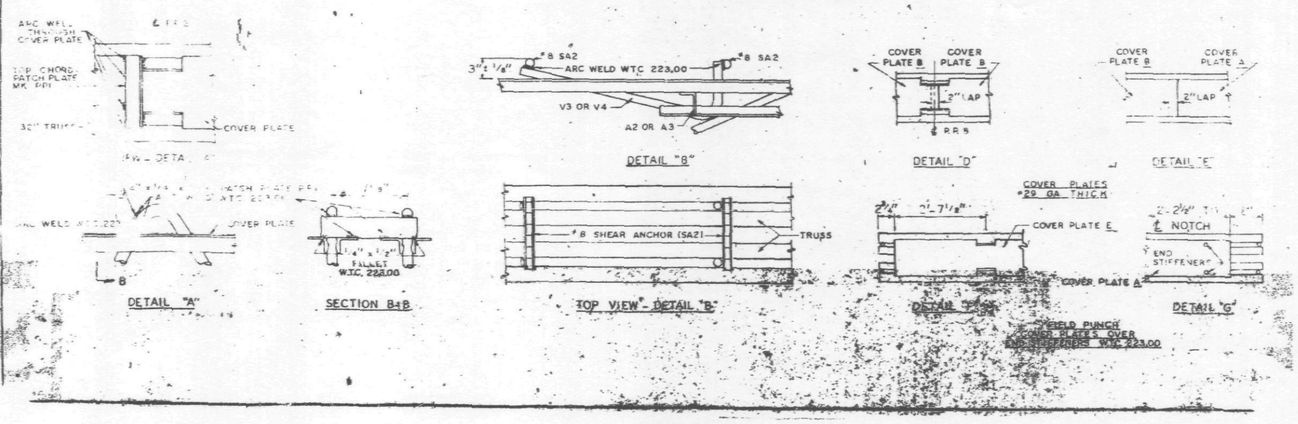


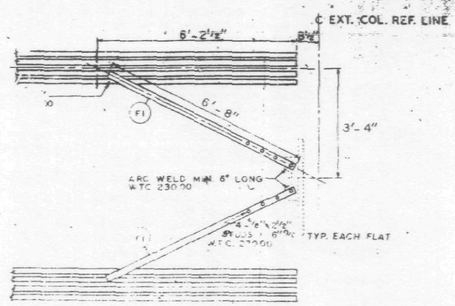
PANEL NO. E3N SIZE 20' x 59'-0¾"

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.





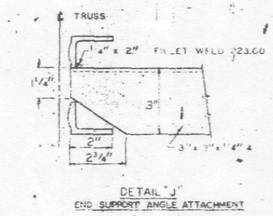




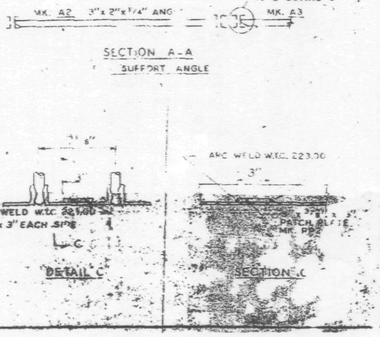
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MARK	#	SIZE	DRWG.
FLOOR TRUSSES	T28N	1	C32T28N - 57'-9"	ST 228N
	T31	2	C32T31 - 59'-0¾"	ST 231
	T32	2	C32T32 - 59'-0¾"	ST 232
	T33	1	C32T33 - 59'-0¾"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 19'-11"	ST 208C
	T8D	1	24T8D - 19'-11"	ST 208D
	T8E	1	24T8E - 19'-11"	ST 208E
	T15	1	24T15 - 19'-11"	ST 215
3"x 2"x¼" ANGLE	A1	4	3" x 2" x¼" x 19'-11"	ST 403
	A2	4	3" x 2" x¼" x 5'-11"	ST 403
	A3	2	3" x 2" x¼" x 5'-11"	ST 403
	A4	1	3½" x 2" x¼" x 13'-3"	ST 403
	A8	1	3½" x 2" x¼" x 6'-8"	ST 405
DIAGONAL FLATS	F1	6	1½" x ⅝" x 6'-8"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-6"	ST 303
EDGE CLIPS	C1	10	2" x 2" x ¼" x 0'-8"	ST 400
	C2	4	2½" x 1½" x ¼" x 6"	ST 400
ANCHOR SADDLE	DUS-1	2	⅜" x ⅞" x 2½" x 3'-6"	ST 298
	DUS-3	1	⅜" x ⅞" x 2½" x 3'-6"	ST 298
CONNECTION BAR	CB1	1	¼" ϕ x 1'-3"	ST 400
	CB2	6	1⅝" ϕ x 1'-3"	ST 400
	CB3	6	1⅝" ϕ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3½" x ⅜" x 1'-2"	ST 401
	F2	1	4'-2" x ¼" x 1'-8"	ST 400
	F3	1	4'-1" x ¼" x 1'-10"	ST 400
	F5	1	4'-1" x ¼" x 1'-6"	ST 400
	PE	1	4'-2" x ¼" x 0'-7"	ST 401
*8 SHEAR ANCHOR	SA2	6	*8 STUD x 0'-8"	ST 406
PATCH PLATES	PP1	18	2" x ¼" x 0'-2"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. HOPEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SKILLING-HELLE CHRISTIANSEN-ROBERTSON Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
REJECTED
JOB 9369 SK

NO.	DATE	REVISION	BY

REF. DRWGS.

7-A32-10	7-22-68
7-A83-49	1-8-69
7-A84-1	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SA-124	1-8-69
7-A81-25 & 28	1-6-69
7-A81-29 & 30	1-6-69
7-A82-19	1-6-69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

EAST

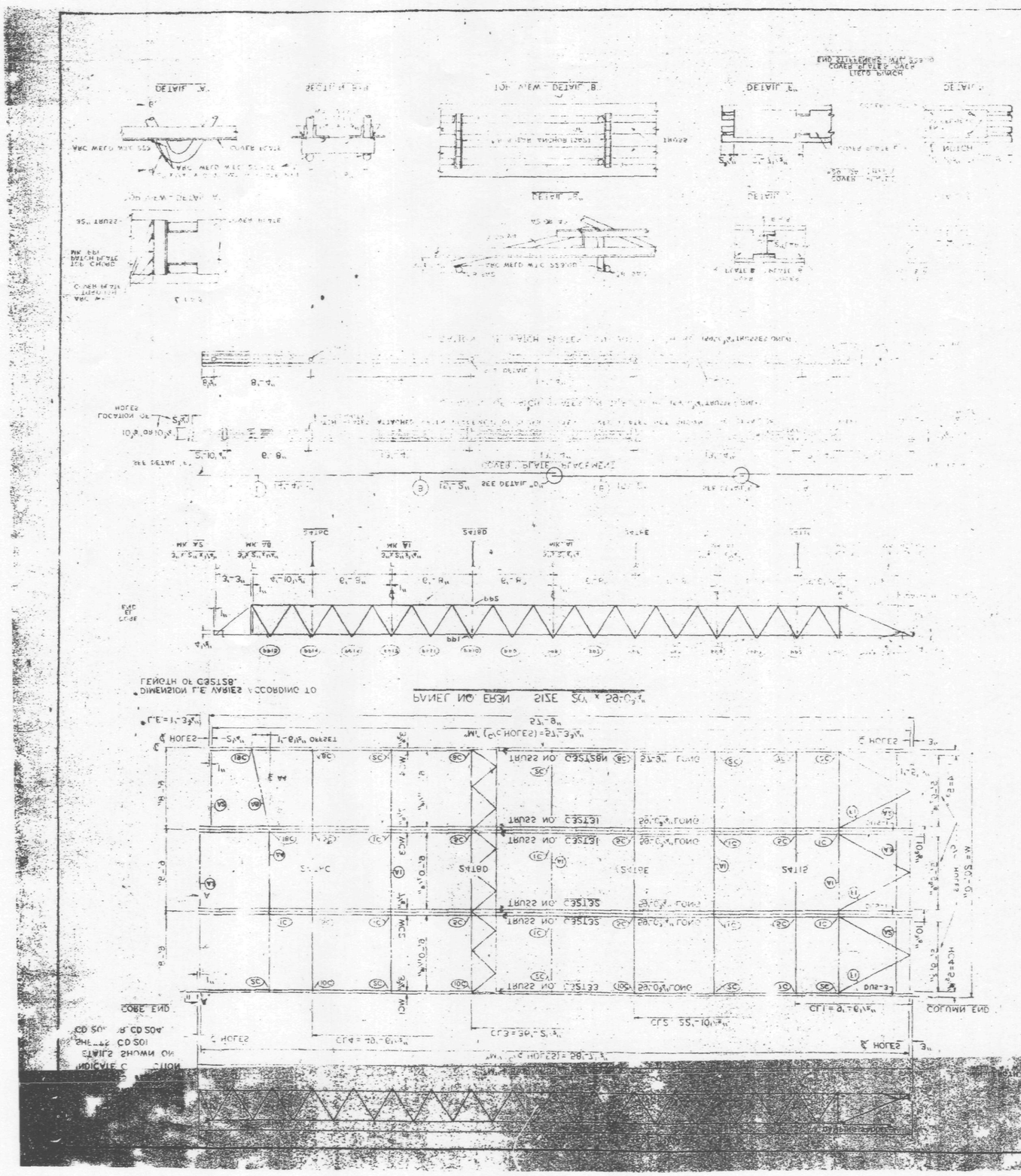
BLDG. A FLOORS 44 (NORTH ONLY)

PANEL E3N - 20' x 59'-0¾"

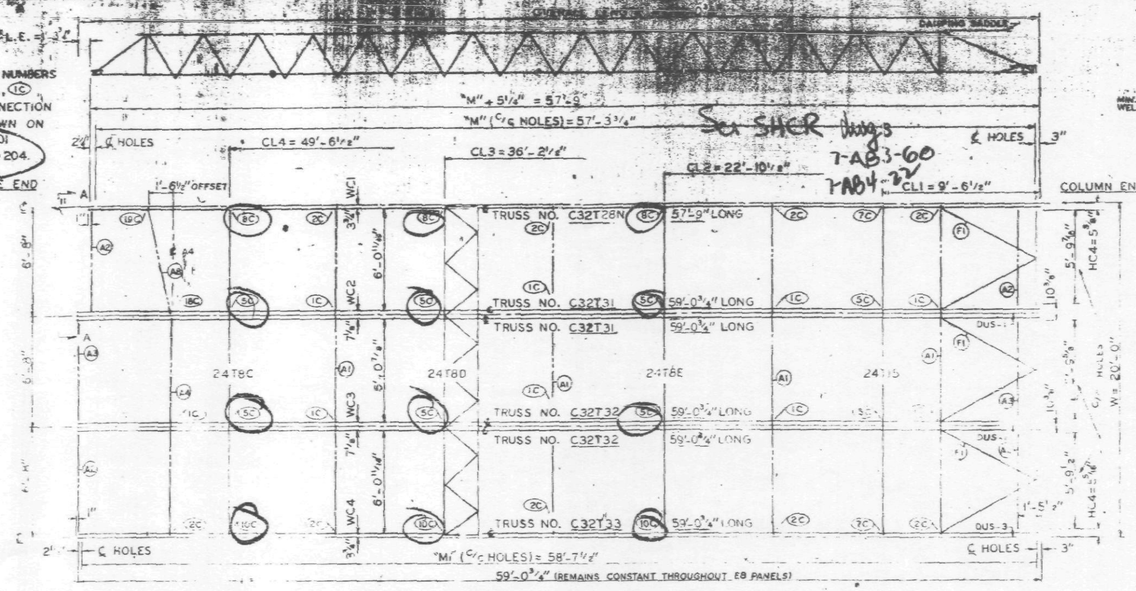
BLDG. B FLOORS 44 (WEST ONLY)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-49	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.N.J.	DATE	DRAWN BY: gdc DATE APRIL 2, 1969	
APPROVED FOR FABRICATION BY SHOP FABRICATION	DATE	CHECKED BY: T.M.CHURA DATE APRIL 2, 1969	IN CHARGE OF PROD. DEV.
DETAILED		FABRICATION CONT. NO. W.T.	SHEET 44 PP E3N

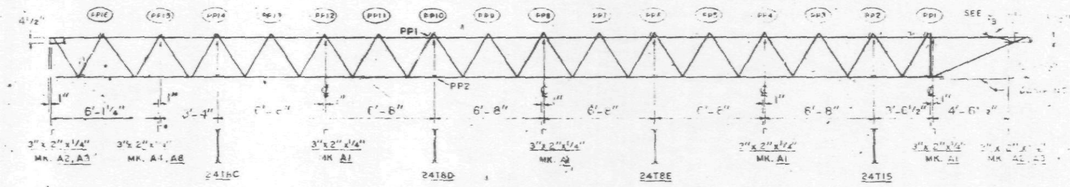


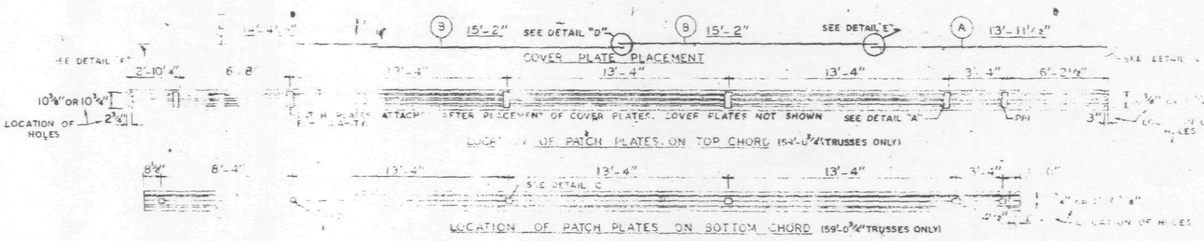
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.

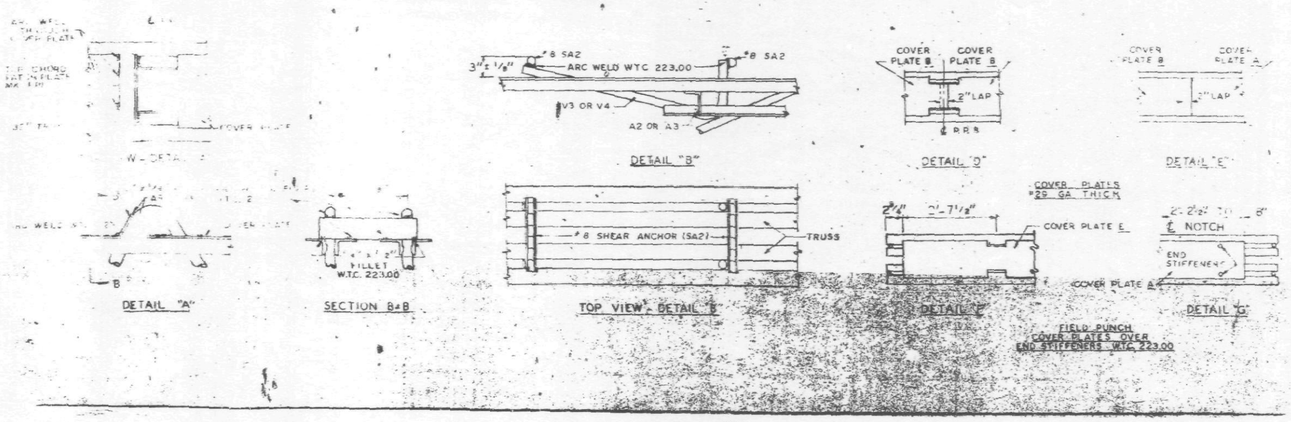


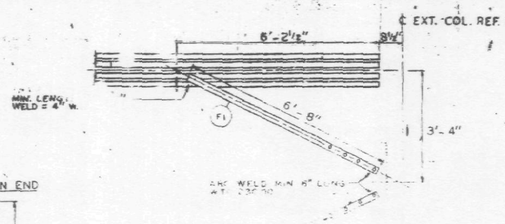
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. E8N SIZE 20' x 59'-0 3/4"





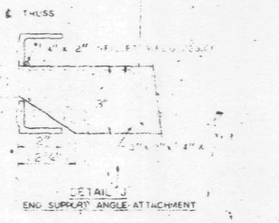


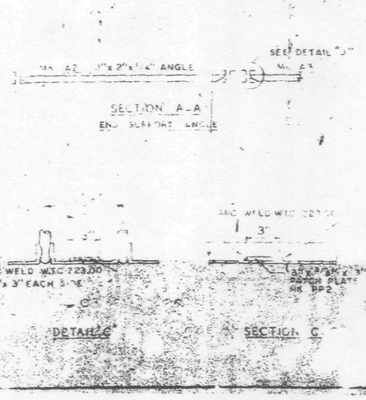


REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T28N	1	C32T28N - 57'-9"	ST 228N
	T31	2	C32T31 - 59'-0 3/4"	ST 231
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 19'-11"	BT 208C
	T8D	1	24T8D - 19'-11"	BT 208D
	T8E	1	24T8E - 19'-11"	BT 208E
	T15	1	24T15 - 19'-11"	BT 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-1"	ST 403
	A2	4	3" x 2" x 1/4" x 15'-11 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 15'-11 1/2"	ST 403
	A4	1	3" x 2" x 1/4" x 1'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-3 1/2"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 6" x 6'-8"	ST 401
VERT. PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	E	5	9" x .0135" x 14'-8 1/2"	ST 303
FLANGE CLIPS	C1	10	2" x 1 1/2" x 1/4" x 10'-8"	ST 402
	C2	4	2" x 1 1/2" x 1/4" x 8"	ST 402
SADDLE	S1	2	2" x 3 1/2" x 1/4" x 3'-8"	ST 243
	S2	1	2" x 3 1/2" x 1/4" x 6'-8"	ST 243
CONNECTION BAR	CB1	1	3/4" x 3" x 3'-8"	
	CB2	6	3/4" x 3" x 6'-8"	
CONNECTION PLATES	A1	5	3/8" x 8" x 2'-4"	
	A2	1	3/8" x 8" x 2'-4"	
	P3	1	3/8" x 8" x 2'-4"	
	F5	1	1/4" x 8" x 2'-4"	ST 400
	P7	1	1/4" x 8" x 2'-4"	ST 401
SHEAR ANCHOR	SA2	8	3/4" x 4" x 5"	
PATCH PLATES	PP1	10	3/8" x 6" x 2'-1"	ST 410
	PP2	18	3/8" x 3'-6" x 1'-1"	ST 410

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 4/30/69 By SK

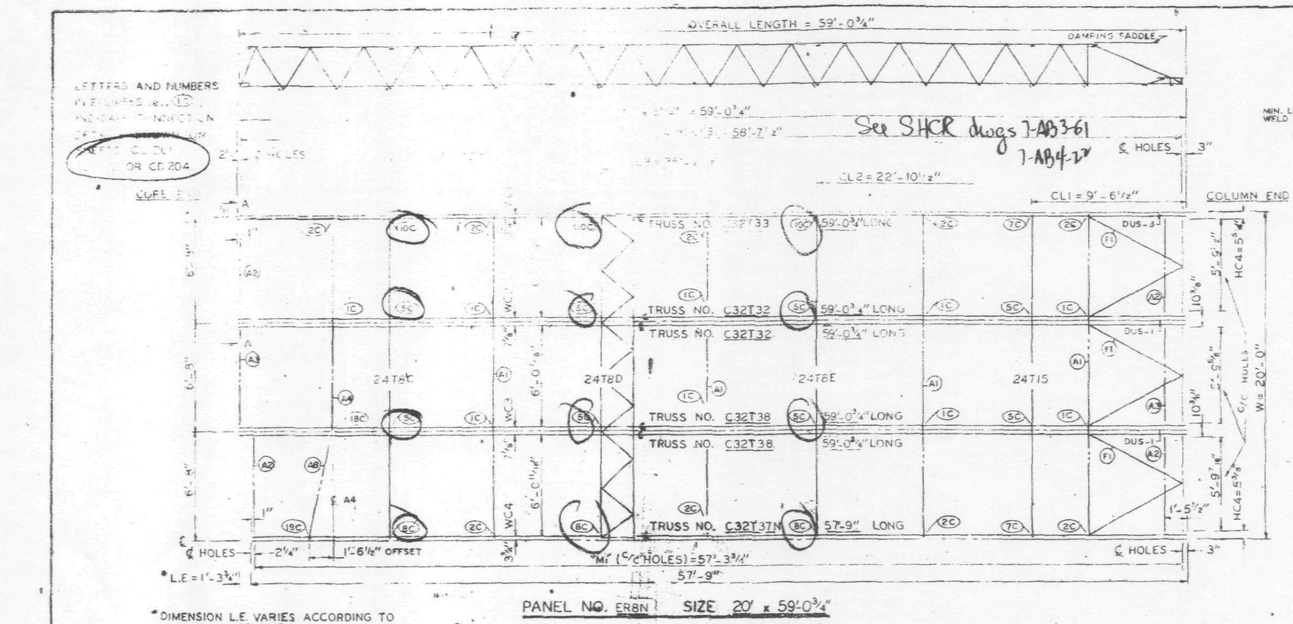
NO.	DATE	REVISION	BY

REF. DRAWG.

A-AB2-10	7-22-68
7-AB3-60	1-6-69
	10-15-68
	7-22-68
A-A4-A7	10-15-68
SK-124	1-8-69
7-AB1-25 & 28	1-6-69
7-AB1-29 & 30	1-6-69
7-AB2-19	1-6-69

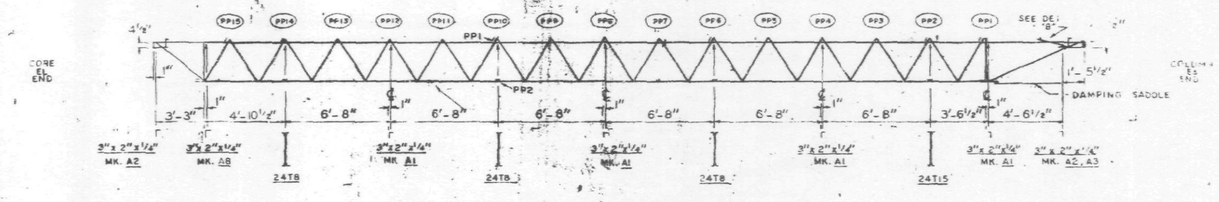
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
℄ A. FLOORS 44 (SOUTH ONLY)
PANEL E8N - 20' x 59'-0 3/4"

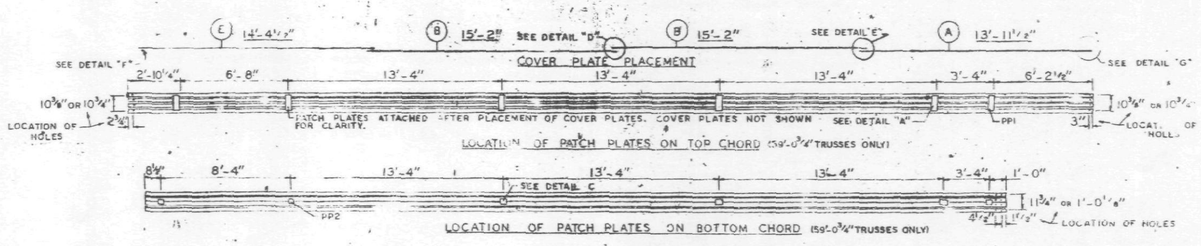
FABRICATION BY EAGLE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-60
APPROVED FOR FABRICATION DATE
BY FOR PONTIFEX
DRAWN DATE APRIL 2,1969
APPROVED FOR FABRICATION DATE
BY FOR FABRICATOR
CHECKED DATE APRIL 2,1969 M. T. CHURA
IN CHARGE OF PROD. DEV.
DETAILED BY
FABR. NO.
CONT. NO.
SHEET NO. FP E8N

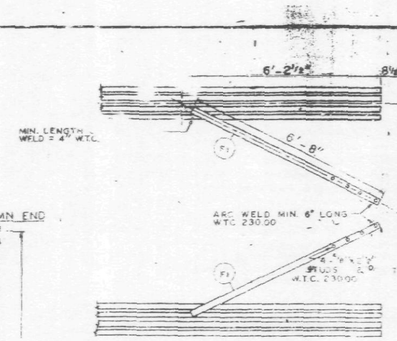


PANEL NO. ERBN SIZE 20' x 59'-0¾"

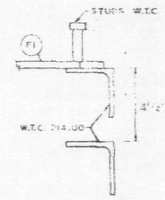
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T37.







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL CRISS CROSS BRACES PLACED OVER DECK BY W.T.C. 228.00

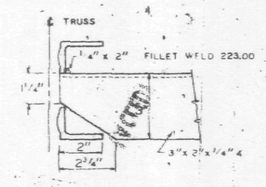


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

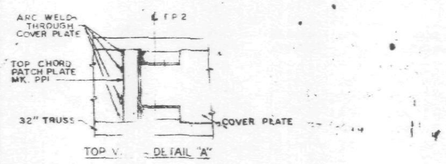
REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T32	2	C32T32 - 59'-0¾"	ST 232
	T33	1	C32T33 - 59'-0¾"	ST 233
	T37N	1	C32T37N - 57'-9"	ST 237N
	T38	2	C32T38 - 59'-0¾"	ST 238
	C	2	C	ST 23C
	D	2	D	ST 23D
	E	2	E	ST 23E
	F1	2	F1	ST [illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
3" x 2" x ¼" ANGLE	A2	4	3" x 2" x ¼" x [illegible]	ST 400
	A3	2	3" x 2" x ¼" x [illegible]	ST 400
	A8	2	3" x 2" x ¼" x [illegible]	ST 400
DIAGONAL FLATS	E	2	4½" x 4½" x [illegible]	ST 400
	A	1	9" x .0135" x [illegible]	ST 400
	B	1	9" x .0135" x [illegible]	ST 400
	C	1	9" x .0135" x [illegible]	ST 400
ANGLE CLIPS	CA	2	2" x 2½" x 4" x [illegible]	ST 400
	CB	4	2½" x 1½" x 1¼" x [illegible]	ST 400
DAMPING SADDLE	DUS-1	2	4½" x 3½" x 5/16" x 5'-6"	ST 256
	DUS-3	1	3½" x 3½" x 5/16" x 5'-6"	ST 256
CONNECTION BAR	CB	1	1" ϕ x 3"	ST 400
	CB2	6	¾" ϕ x 3"	ST 400
	CB7	6	1⅜" ϕ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3½" x ⅜" x [illegible]	ST 400
	F2	1	4½" x [illegible]	ST 400
	F3	1	4½" x [illegible]	ST 400
	F5	3	4½" x [illegible]	ST 400
	PC	1	4½" x [illegible]	ST 400
⅞" SHEAR CONNECTOR	SA2	[illegible]	⅞" HEADED x [illegible]	[illegible]
PATCH PLATES	PP1	18	2" x ¼" x [illegible]	ST 400
	PP2	18	3" x 3/16" x [illegible]	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ½OGEN RODS IN THE E-70 SERIES OR EQUAL.

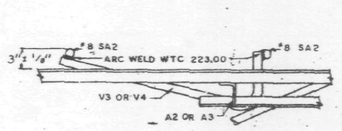
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



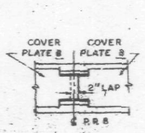
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



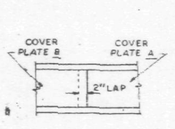
TOP V. - DETAIL "A"



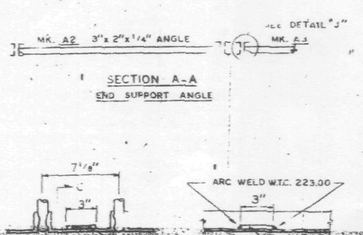
DETAIL "B"



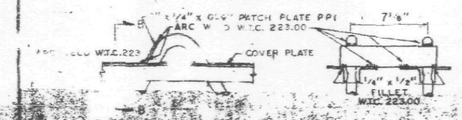
DETAIL "D"



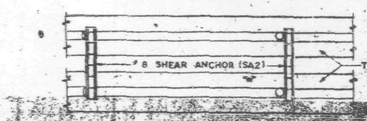
DETAIL "E"



SECTION A-A
END SUPPORT ANGLE



DETAIL "A" SECTION B-B



TOP VIEW - DETAIL "B"

DETAIL "G"

NO.	DATE	REVISION	BY

SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
REJECTED
4/23/69 BY SK

REF. DRWGS.

7-AB2-10	7-22-68
7-AB3-61	1-6-69
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	1-6-69
7-AB1-29 & 30	1-6-69
7-AB1-33 & 34	1-6-69
7-AB2-19	1-6-69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

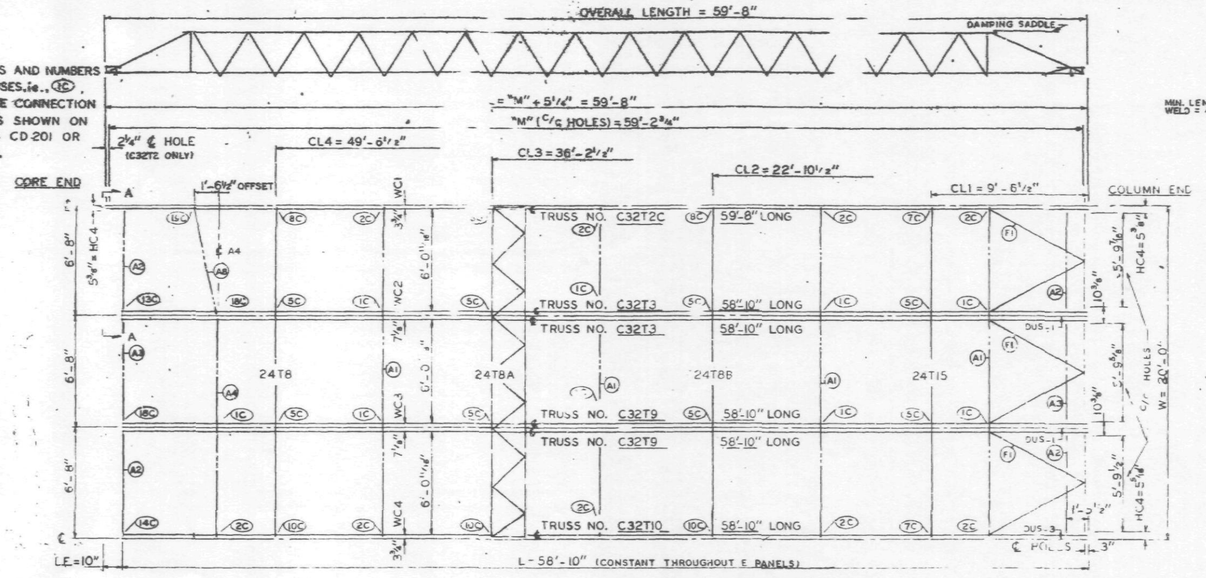
BL A FLOORS 44 (SOUTH ONLY)

PANEL ERBN - 20' x 59'-0¾"

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-61	PLATE
APPROVED BY:	DRAWN BY: RES DATE: APRIL 2, 1969	
APPROVED BY:	CHECKED BY: J.M.CHURA DATE: APRIL 2, 1969	IN CHARGE OF PROD. DEPT.
		ERBN

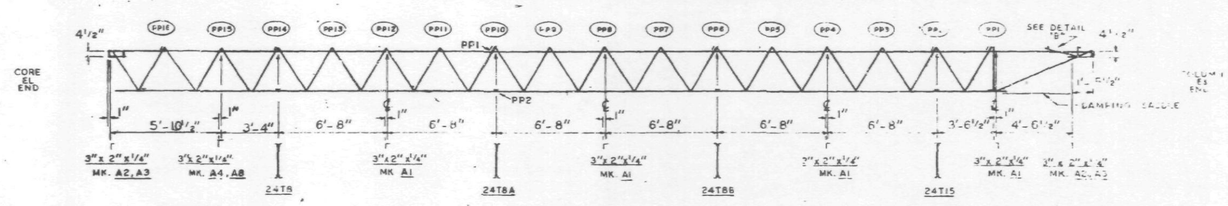
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

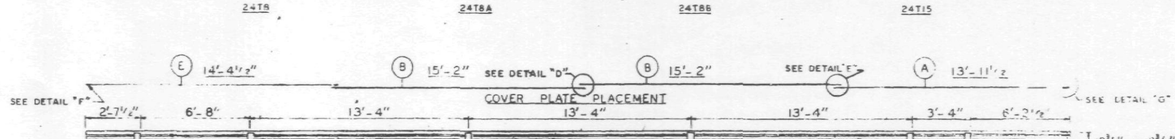


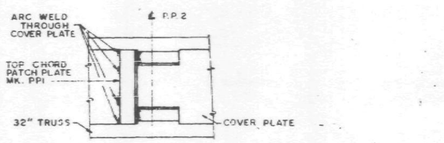
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

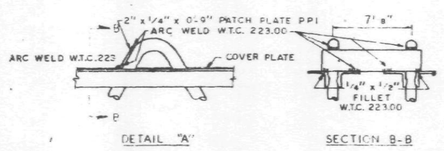
PANEL NO. E1C SIZE 20' x 59'-8"

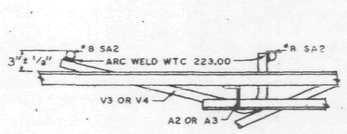
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

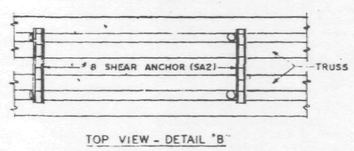


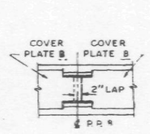


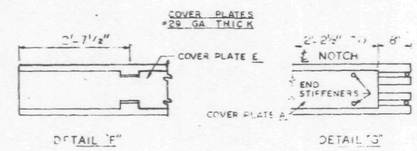




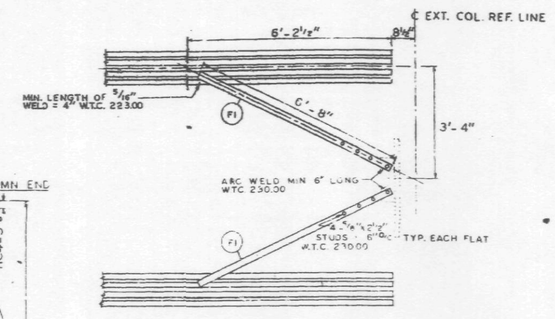




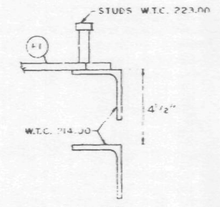




FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

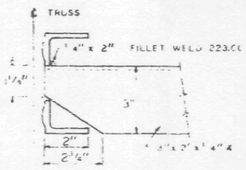


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T2C	1	C32T2C - 59'-8"	ST 202C
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T1C	1	C32T1C - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST [illegible] 8
	T8A	1	24T8A - 19'-11"	[illegible] 08A
	T6B	1	24T8B - 19'-11"	[illegible] 08B
	T15	1	24T15 - [illegible]-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" [illegible] x 19'-11"	ST 403
	A2	4	3" x 2 1/2" x 5'-11 5/16"	ST 40
	A3	2	3" x 2" x 1/4" x 5'-11 5/16"	ST 403
	A4	1	3" x 2" x 1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-[illegible]"	ST 405
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-[illegible]	ST 402
COVER PLATES	A	3	9" x .0135" x 10'-11 1/2"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-4 1/2"	ST 303
FASCIA CLIP	C1	20	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/4" x 3'-6 5/8"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/4" x 3'-6 5/8"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	13/16" ϕ x 1'-3"	ST 400
	CB3	6	13/16" ϕ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 1'-1 1/2"	ST 400
	P2	1	4 1/2" x 3/4" x 0'-[illegible]"	ST 400
	P3	1	4 1/2" x 3/4" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x 3/4" x 6'-9"	ST 401
8 SHEAR ANCHOR	SA2	6	8 SHEAR x 0'-4"	ST 406
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	18	3" x 3/4" x 0'-3"	ST 400

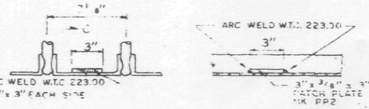
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE



NO.	DATE	REVISION	BY

REF. DRWGS.

7-A82-3 & 10	7-22-68
7-A82-11	7-22-68
7-A84-1, 3.1	1-3-68
7-A84-15 & 16, 39	7-22-68
7-A84-42	10-15-68
SA-124	10-11-68
7-A81-3	7-22-68
7-A81-6, 7 & 8	7-22-68

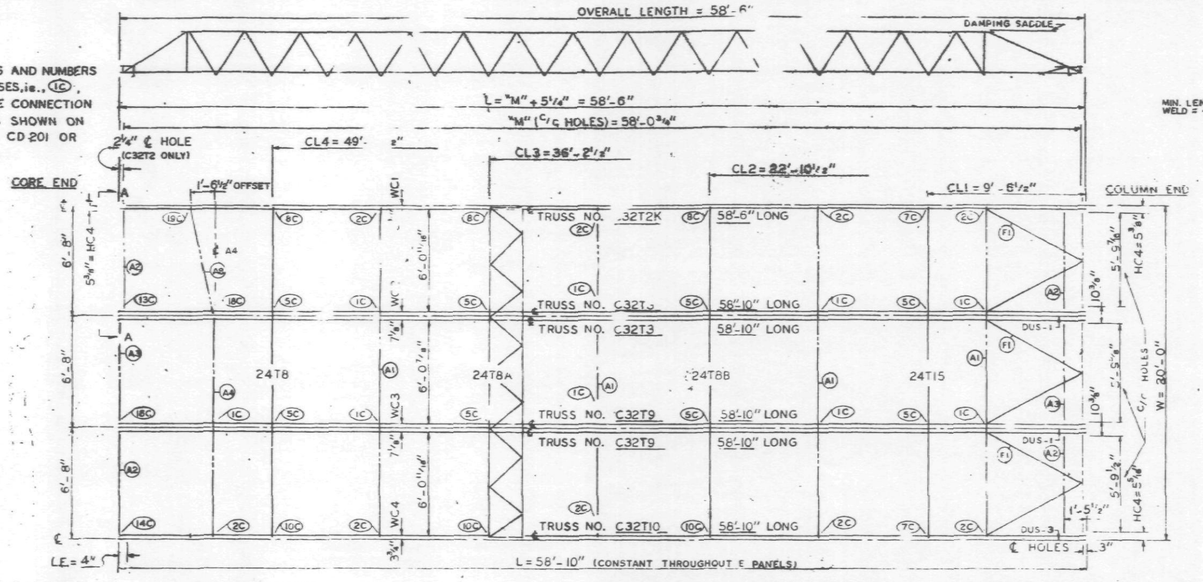
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91, 93-106 (S)
PANEL E1C - 20' x 59'-8

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-11 7-22-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONTA	DATE 11/15/68	DRAWN BY GDC DATE NOV. 1, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHUNA DATE NOV. 4, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER, JR.		FABRICATION CONT. NO. WTC 221	SHEET NO. FP E1C

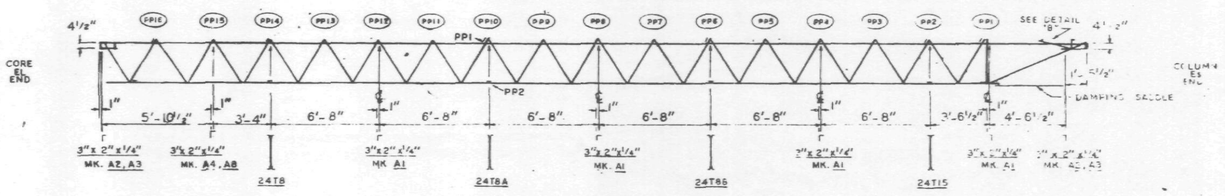
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

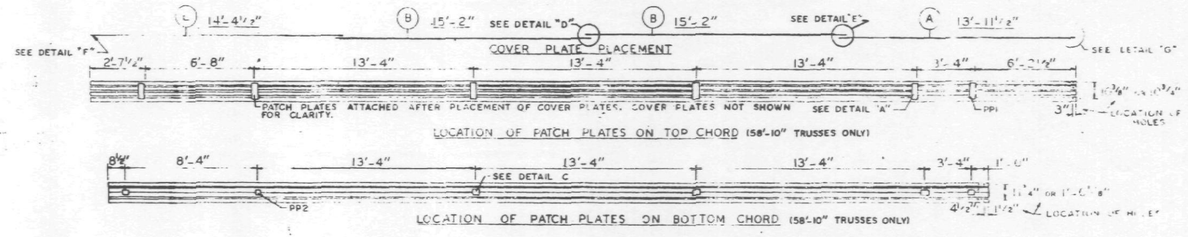


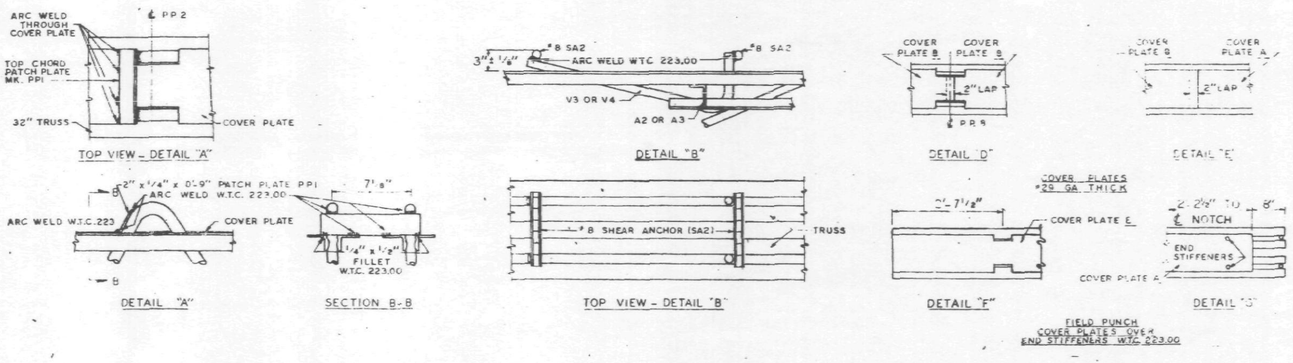
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

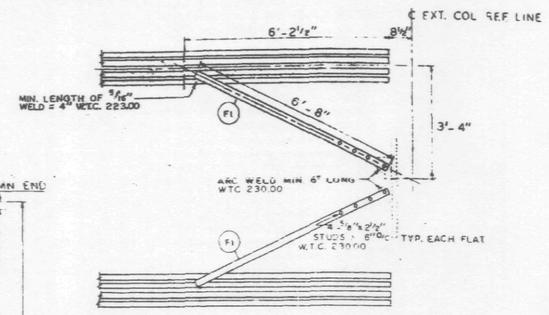
PANEL NO. E1K SIZE 20' x 58'-6"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

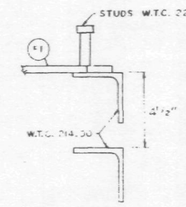








TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



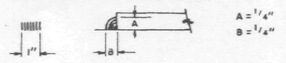
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

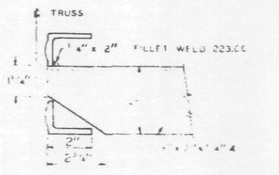
REQUIRED MATERIAL PER PANEL

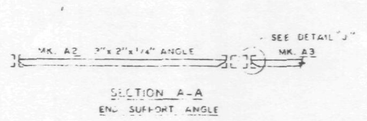
MATERIAL	MK.	PCS.	SIZE	REF. DWG.
FLOOR TRUSSES	T2K	1	C32T2K - 58'-6"	ST 202K
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 11"	ST 208A
	T8B	1	24T8 9'-11"	ST 208B
	T15	1	24T15 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 303
	A2	4	3" x 2" x 1/4" x 5'- 10"	ST 40
	A3	2	3" x 2" x 1/4" x 5'- 3/8"	ST 403
	A4	1	3 1/2 x 2" x 1/4" x 3'- 3"	ST 405
	A8	1	3 1/2" x 2" x 1/4" x 6'-0 3/8"	ST 525
DIAGONAL FLATS	F1	6	1 3/8" x 6'-9"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 14'-4 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
SADDLE PLATE	SAP-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-6 7/8"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/16" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	1 1/16" ϕ x 1'-3"	ST 400
	CB3	6	1 5/8" ϕ x 1'-5"	ST 400
CONNECTION PLATES	PP1	5	3 1/2" x 3/8" x 4'-1 1/2"	ST 400
	PP2	1	4'-2" x .34" x 1'-6"	ST 400
	PP3	1	4'-1" x .34" x 1'-0"	ST 400
	PP5	1	4'-1" x 1/4" x 1'-6"	ST 400
	PP7	1	4'-2" x .34" x 6'-9"	ST 401
#8 SHEAR ANCHOR	SA2	8	1" ϕ HEADED x 0'-4"	ST 410
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

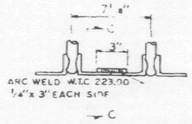
(1) ALL ARC WELD TO BE MADE WITH LOW HY. HOBART RODS IN THE E-7C SERIES OR EQUAL.

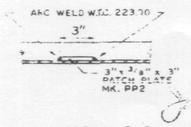
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.











NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 10	7-22-68
7-AB3-11	7-22-68
7-AB4-3, 3.1	1-3-68
7-AB4-15 & 16 & 39	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

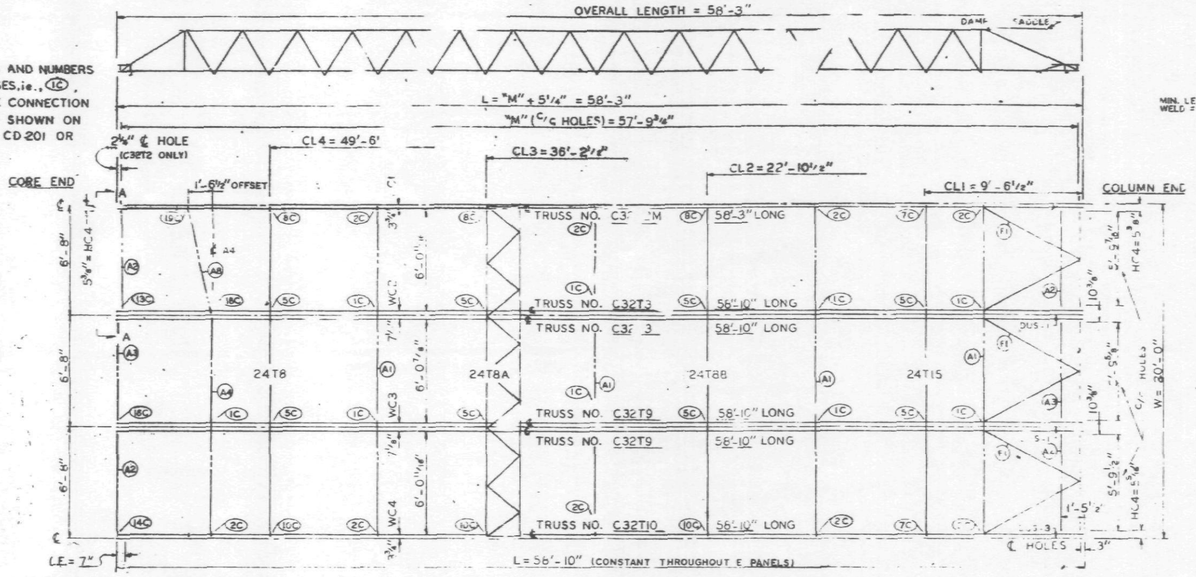
BLDG. A FLOORS 46 (N)

PANEL E1K - 20' x 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-11 7-22-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 11/15/68	DRAWN BY [illegible] DATE NOV. 1 1968	
APPROVED FOR FABRICATION BY _____ FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE NOV. 4, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: R. CARL WEBER	LACLEDE STEEL CO.	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP E1K

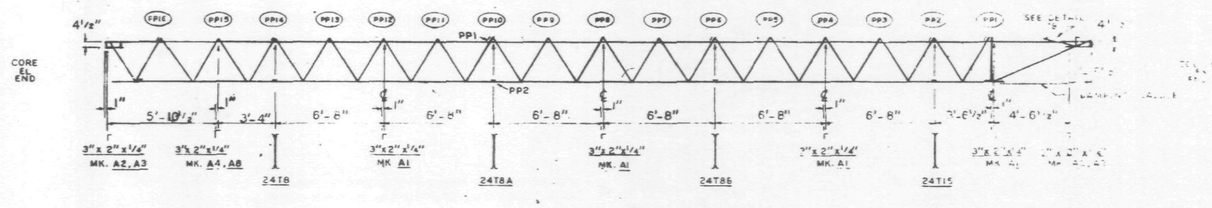
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

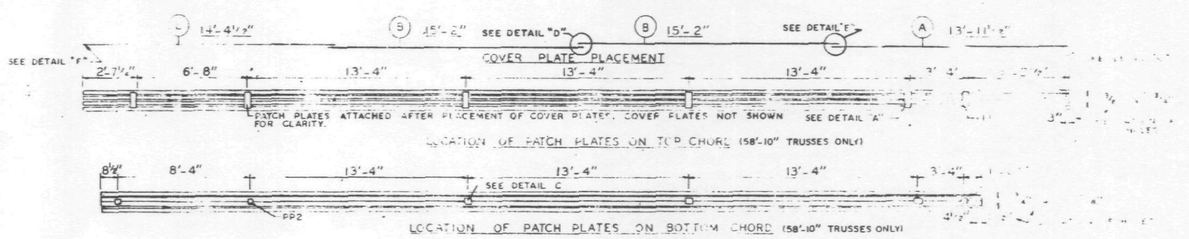


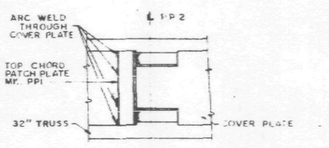
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1M SIZE 20' x 58'-3"

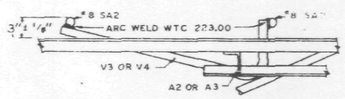
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 205, CD 208 & CD 207 RESPECTIVELY.



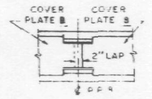




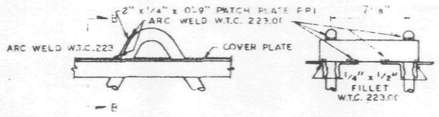
TOP VIEW - DETAIL 'A'



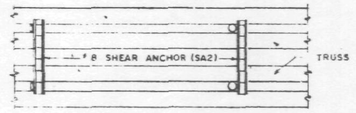
DETAIL "B"



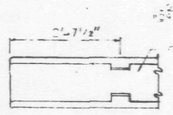
DETAIL 'C'



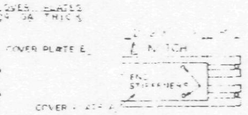
DETAIL "A" SECTION B-B



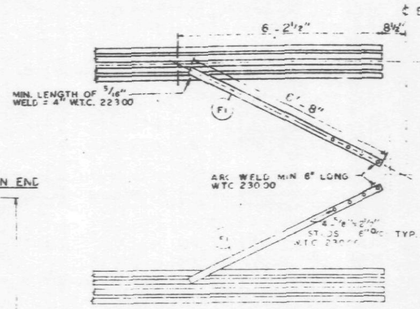
TOP VIEW - DETAIL "B"



DETAIL "E"



DETAIL "D"



TYPICAL PLAN OF TOP CHORD SPLICE FOR DIAGONAL TRUSS CHORDS FLANGE PLATE ST W.T.C. 22000

DETAIL W.T.C. 22300

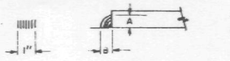
DETAIL OF ATTACHMENT FOR DIAGONAL FLAT 4 1/2" ABOVE BOTTOM CHORD FLANGE PLATE ST W.T.C. 22300

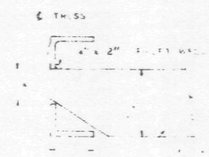
REQUIRED MATERIAL PER PANEL

MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T2M	1	C32T2M - 58'-3"	ST 20-M
	T3	2	C32T3 - 58-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	BT 18
	T8A	1	24T8A - 19'-11"	BT 18A
	T8B	1	24T8B - 19'	BT 208B
	T15	1	24T15 - 11"	BT 215
3" x 2" x 1/4" ANGLE	A1	1	3" x 2" x 1/4" x 5'-11"	ST 401
	A2	4	3" x 2" x 1/4" x 5'-11 15/16"	ST 4
	A3	1	3" x 2" x 1/4" x 5'-11 15/16"	ST 403
	A4	1	3 1/2" x 2" x 1/4" x 1'-11"	ST 404
	A8	1	3 1/2" x 2" x 1/4" x 6'-5 1/2"	ST 405
DIAGONAL FLATS	F	6	1'-2 1/2" x 5 1/2" x 6'-9"	ST 402
VERT. PLATES	A	3	1/4" x 13'-11 1/2"	ST 303
	B	6	1/4" x 15'-2"	ST 303
	L	1	1/4" x 0'-3 5/8" x 14'-4 1/2"	ST 303
CAP PLATE	C1	2	2" x 1'-2" x 1'-4" x 0'-8"	ST 406
	C2	4	2" x 1'-0" x 1'-4" x 6"	ST 406
ANCHOR PLATE	PP1	2	3/8" x 1'-0" x 3'-4" x 6"	ST 298
	PP2	1	3/8" x 1'-0" x 3'-4" x 6"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	13/16" ϕ x 1'-3"	ST 400
	CB3	6	13/16" ϕ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3'-2" x 3/8" x 1'-2"	ST 400
	P2	1	4'-2" x 3/4" x 1'-4"	ST 400
	P3	1	4'-2" x 3/4" x 1'-10"	ST 400
	P5	1	4'-2" x 1/4" x 1'-6"	ST 400
	P7	1	4'-2" x 3/4" x 0'-9"	ST 401
3/8 SHEAR ANCHOR	SA2	6	3/8" x 3" HEAD x 0'-6"	ST 404
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

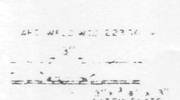
(1) ALL ARC WELD TO BE MADE WITH LOW HY. HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





DETAIL C



SECTION C-C

NO.	DATE	REVISION	BY

SHEET NO.	DATE
1	7-22-68
2	7-22-68
3 & 3A	1-3-68
4 & 4A	7-22-68
4B & 4C	10-15-68
4D	10-11-68
5	7-22-68
6, 7 & 8	7-22-68

FLOOR TRUSS DETAILS

FOR USE OF THIS WEAR PARK AUTHORITY

CONTRACT NO. 72-73 (N)

PANEL E1M - 20' x 58'-3"

FABRICATED BY ANGELES TRUSS COMPANY

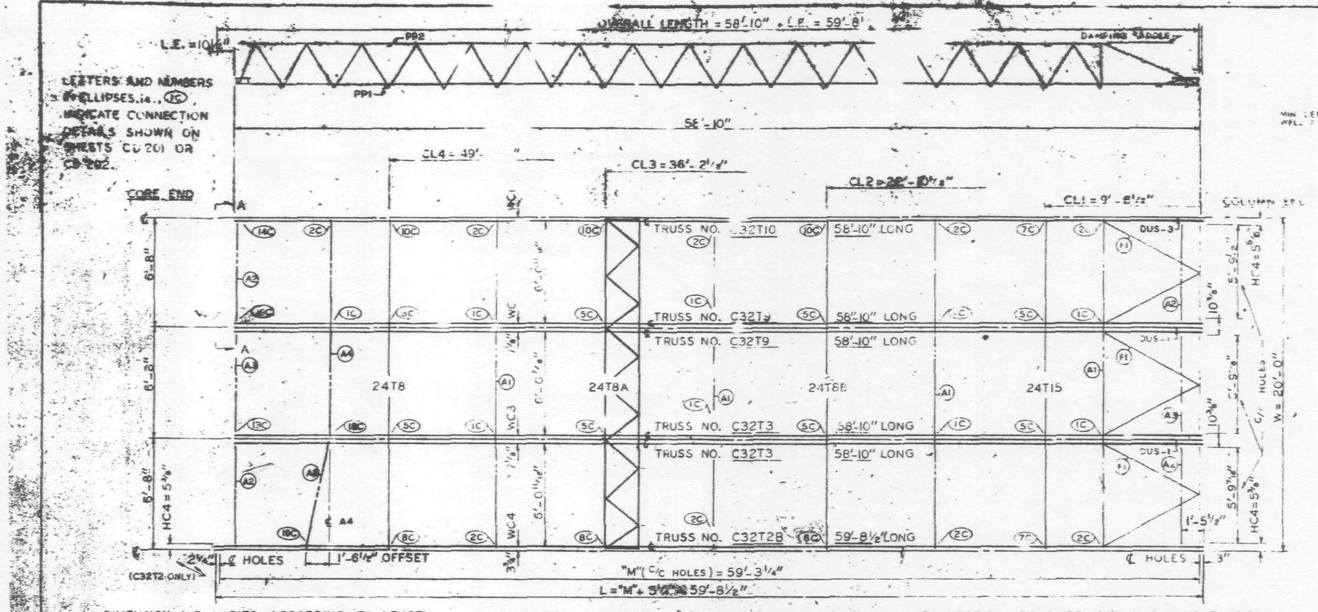
DESIGNED BY [illegible] DRAWN BY [illegible] CHECKED BY [illegible]

APPROVED FOR FABRICATION [illegible] DATE 11/5/68 DRAWN BY [illegible] DATE NOV. 1, 1968

CHECKED BY [illegible] DATE [illegible] CHECKED BY J.M. MINAS IN CHARGE

BY [illegible] FOR FABRICATOR DATE NOV. 4 1968 PROD. REV. DATE

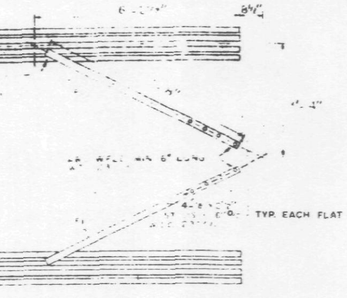
ESTABLISHED BY E. CARL WEBER FABRICATION CONT. NO. 221 SHEET NO. FP E1M

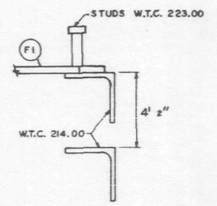


DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIB SIZE 20' x 59'-8 1/2"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



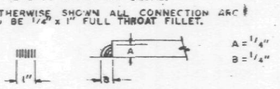


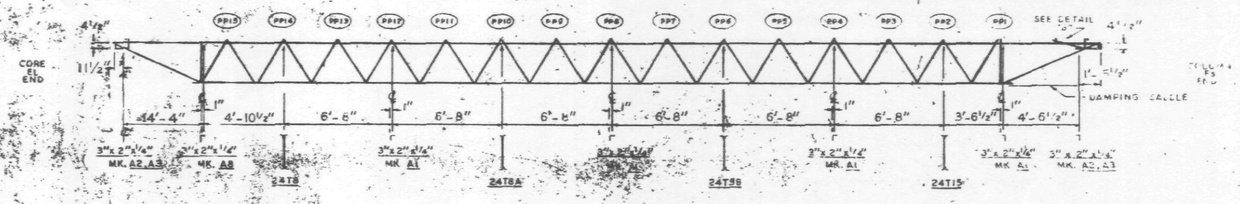
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

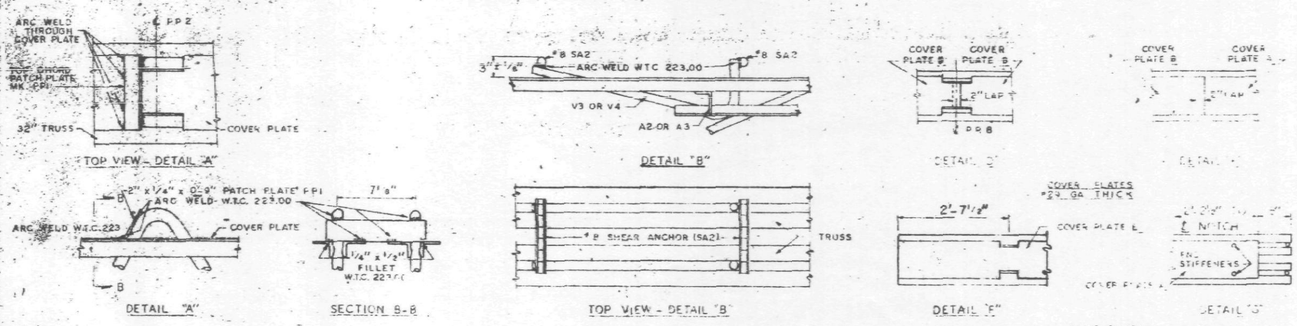
MATERIAL	MK	QTY	SIZE	ST. NO.
TOP CHORD SECTIONS	T2B	1	C32T2B - 59'-8 1/2"	ST 202B
	T3	2	C32T3 - 58'-10"	ST 208
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
DIAGONAL TRUSSES	T8	1	24T8 - 10'-11"	ST 208
	T8A	1	24T8A - 11"	ST 208A
	T8B	1	24T8B - 9'-11"	ST 208B
	T15	1	24T15 - 9'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 15'-1"	ST 403
	A2	2	3" x 2" x 1/4" x 5'	ST 403
	A	2	3" x 2" x 1/4" x [illegible]	ST [illegible]
	A4	1	3" x 2" x 1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-8 1/2"	ST 405
DIAGONAL FLATS	F1	6	1" x 3 1/2" x 6'-8"	ST 402
	A	3	1/4" x 4" x 13'-11"	ST 303
	B	2	1/4" x 0.135" x 15'-2"	ST 303
	C	1	1/4" x 0.135" x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	20	3" x 3 1/2" x 1/4" x 0'-8"	ST 401
	C2	4	2 1/2" x 3 1/2" x 1/4" x 6"	ST 402
[illegible]	[illegible]	2	3" x 3 1/2" x 3/8" x 3'-2"	ST 298
	[illegible]	3	3" x 3 1/2" x 3/8" x 3'-2"	ST 298
CONNECTION BAR	CB	1	3" x 1/4" x 1'-3"	ST 400
	CB2	6	1 3/4" x 1/4" x 1'-3"	ST 400
	CB3	6	1 3/4" x 1/4" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
8 SHEAR ANCHOR	SA2	6	1" 8 HEADED x 0'-4"	ST 400
PATCH PLATES	PP1	16	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

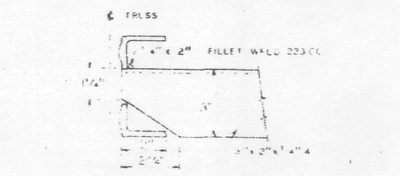
(1) ALL ARC WELD TO BE MADE WITH LOW HY. TOPEN RODS IN THE E-7C SERIES OR EQUAL.

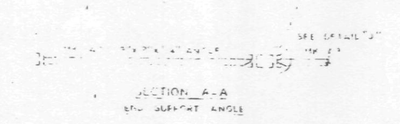
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.











NO.	DATE	REVISION	BY

PREV. DWGS

7-AB2-3 & 10	7-22-68
7-AB3-12	10-15-68
7-AB4-3, 3.1	1-3-69
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS

[illegible] TRUSS [illegible]

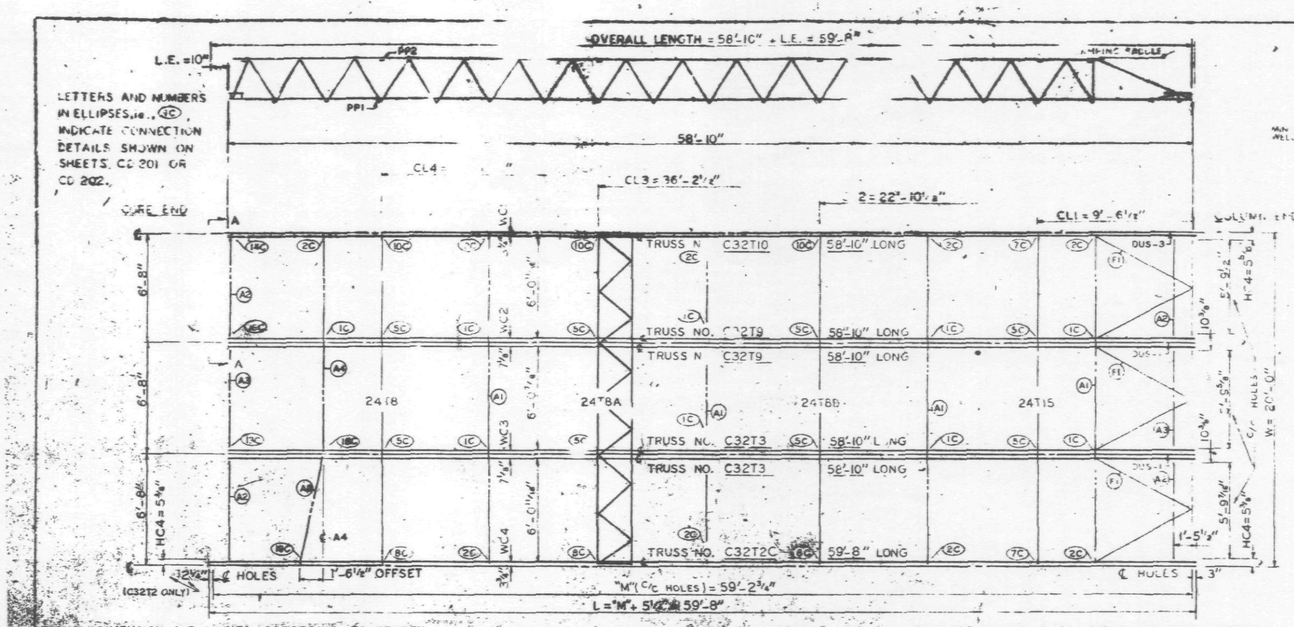
[illegible] PORT AUTHORITY

PLAN # FLOOR 84-91, 93-106 (N)

PANEL EFIB- [illegible] 9.8 1/2"

[illegible] EAGLE STEEL COMPANY

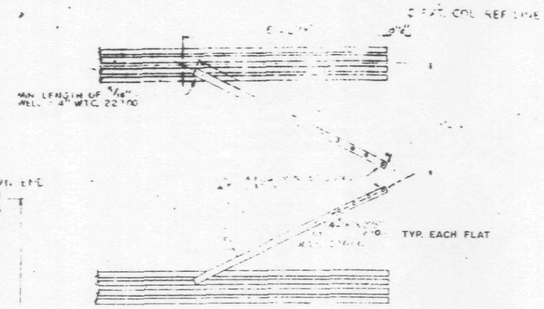
[illegible] DATE	[illegible] NO.	DESIGN DRAWING NO. 7-AB3-12 10-15-68	PLATE
[illegible]	[illegible]	DRAWN BY [illegible]	
[illegible]	[illegible] 11/20/68	DATE NOV 4 1968	
APPROVED FOR FABRICATION BY FABRICATOR	DATE	CHECKED BY T.M. CHURA	INSPECTION OF
		DATE NOV 5 1968	PROJECT
DETAILED BY CARL WEBER		FABRICATION CONT. NO W.O. 221	SHEET NO FP ERIB

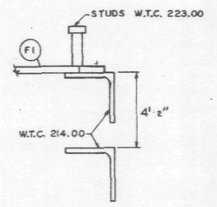


DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIC SIZE 20' x 59'-8"

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



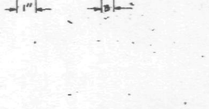


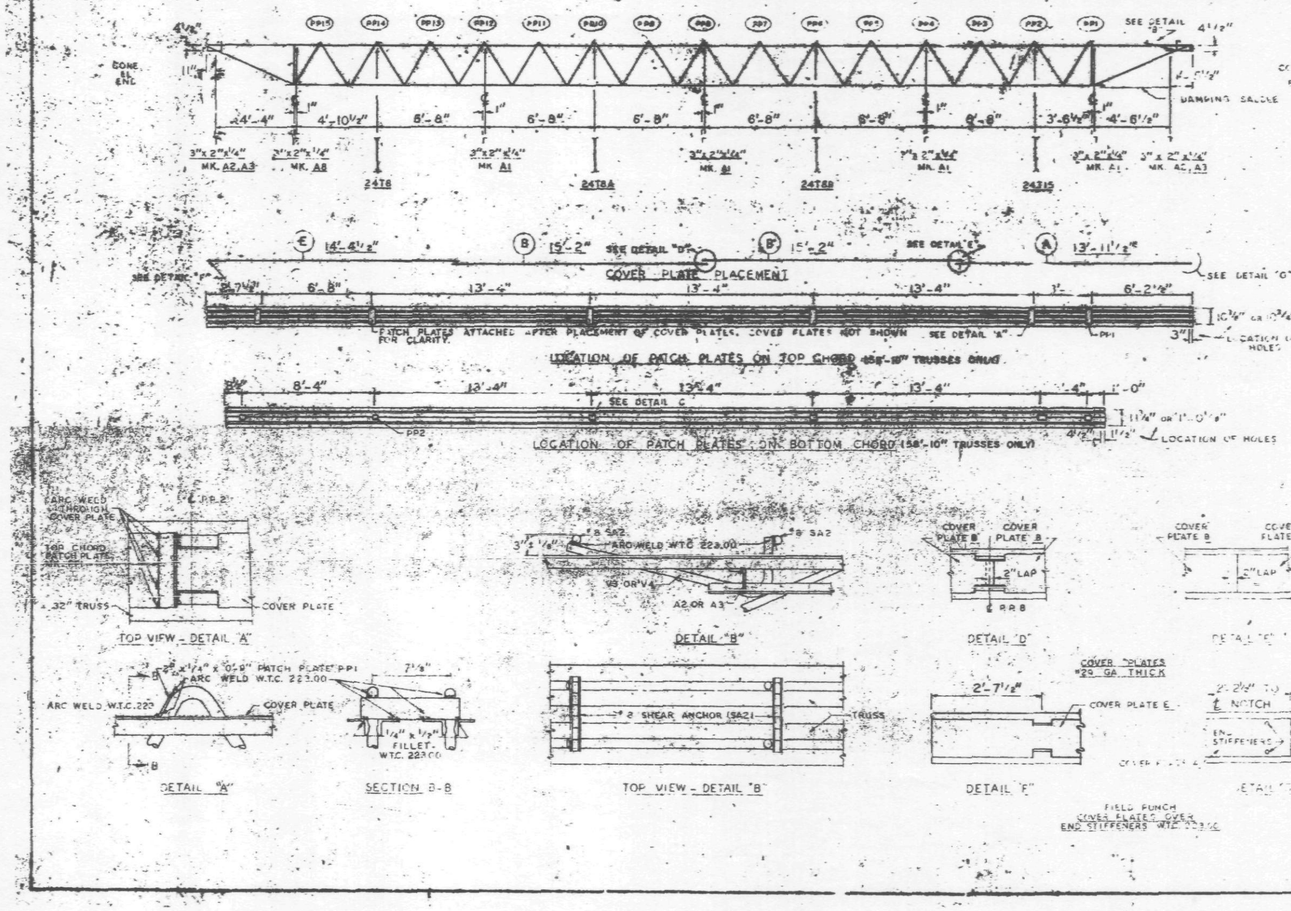
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MATERIAL	MK.	QTY.	SIZE	
TOP CHORD SECTIONS	TC	1	C32T1C - 59'-8"	ST 205C
	TC	1	C32T1 - 58'-10"	ST 209
	TC	1	C32T1R - 58'-10"	ST 210
BOTTOM CHORD SECTIONS	BM	1	24T - 58'-	ST 208
	BMA	1	24T8A - 58'-	ST 208A
	B	1	24T8 - 58'-11"	ST 208B
	BE	1	24T8 - 58'-11"	ST 208
3"x 2"x¼" ANGLE	A1	4	3" x 2" x ¼" x 10'-1"	ST 401
	A2		3" x 2" x ¼" x 5'-1"	ST 401
	A3	6	3" x 2" x ¼" x 1'-8"	ST 401
	A4	1	3"x2"x¼" x 13'-3"	ST 403
	A8	1	3"x 2"x ¼" x 6'-8⅝"	ST 405
DIAGONAL FLATS	F1	6	1½" x 5'-8" x 6'-8"	ST 402
	A	3	x .0135" x 15'-1"	ST 303
	B		x .0135" x 15'-2"	ST 303
		3	x .0135" x 14'-4"	ST 303
ANGLE CLIPS	C1	20	2"x 2"x" x 3"x¼" x 0'-6"	ST 400
	C2	4	2½" x 1½" x ¼" x 8"	ST 400
ANCHOR PLATES	A-TC	2	3" x 3½" x 3"x¼" x 3'-5½"	ST 298
	A-S.3	1	3" x 3½" x 5/8" x 3'-5½"	ST 298
CONNECTION BAR	CB1	1	½ x 1 - 3"	ST 400
	CB2	6	½" ℄ x 1'-3"	ST 400
	CB3	6	½" ℄ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3'-2" x ⅜" x 6½"	ST 400
	P2	1	4'-2" x .39" x 0'-9"	ST 400
	P3	1	4'-2" x .39" x 1'-0"	ST 400
	P5	3	4'-2" x ¼" x 1'-6"	ST 400
	P6	1	4'-2" x .39" x 0'-9"	ST 401
⅞" SHEAR ANCHOR	SA2	6	⅞" HEADED x 0'-9"	ST 400
PATCH PLATES	PP1	18	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

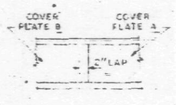




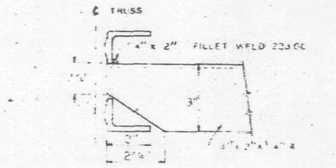
TOP VIEW - DETAIL "A"

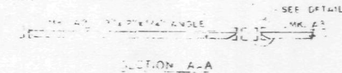
DETAIL "B"

DETAIL "D"



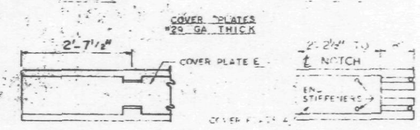
DETAIL "E"





DETAIL "A" SECTION B-B

TOP VIEW - DETAIL "B"



DETAIL "F" DETAIL "H"

FIELD PUNCH COVER PLATES, COVER END STIFFENERS WTC 223.00

DETAIL "C" SECTION C-C

NO.	DATE	REVISION	BY

MFG. DRWGS.	7-A82-3 & 10 — 7-22-68
	7-A83-12 — 10-15-68
	7-A84-1, 7, 11 — 1-3-68
	7-A84-15 & 16 — 7-22-68
	7-A84-42 — 10-15-68
	24-124 — 10-11-68
	7-A81-3 — 7-22-68
	7-A81-6, 7 & 8 — 7-22-68

FLOOR PANEL DETAILS FOR NORTH TRADE CENTER - N.Y.C.

THE PORT OF NEW YORK AUTHORITY

BUILDING FLOOR 50-58, 60-66, 68-74, 80-91, 93-106 (S)

PANEL ERIC 5' x 59'-8"

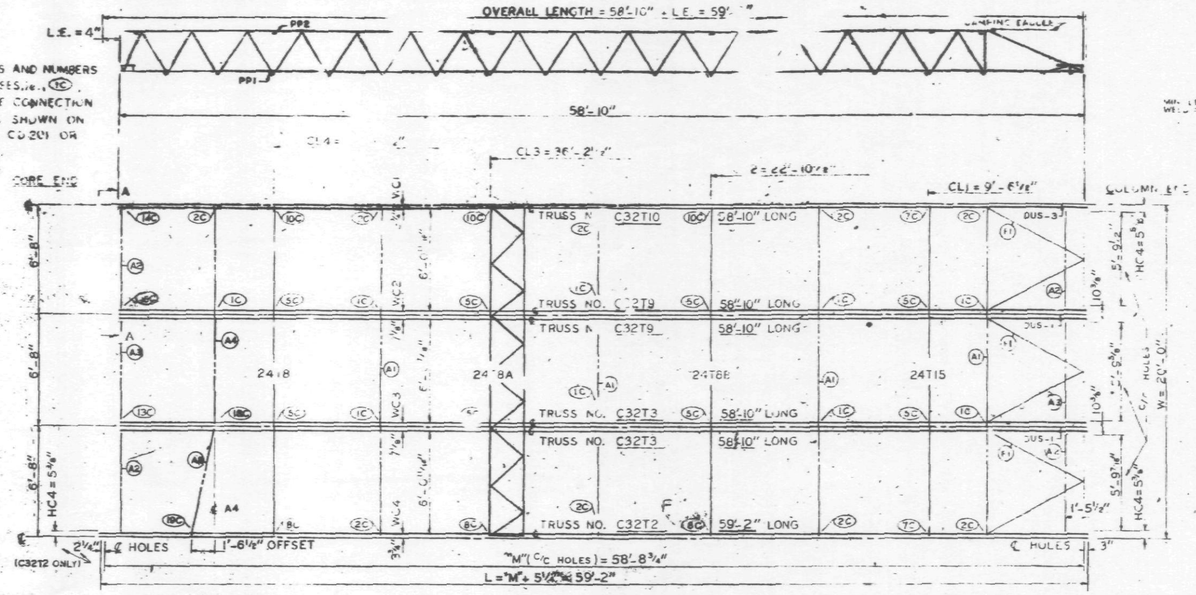
FABRICATION BY ACME STEEL COMPANY

CHICAGO, ILLINOIS — DRAWING NO. 7-A83-12 10-15-68

DESIGN BY [illegible] DATE 11/20/68 — DRAWN BY [illegible] DATE NOV 4 1968

CHECKED BY T.W.CHURP — DATE NOV 5 1968

FABRICATION CONT. NO. 221 — SHEET NO. FP ERIC

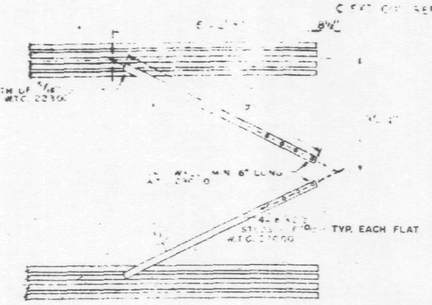


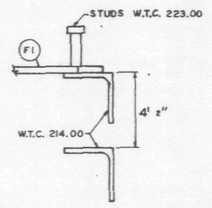
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIF , SIZE 20' x 59'-2"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



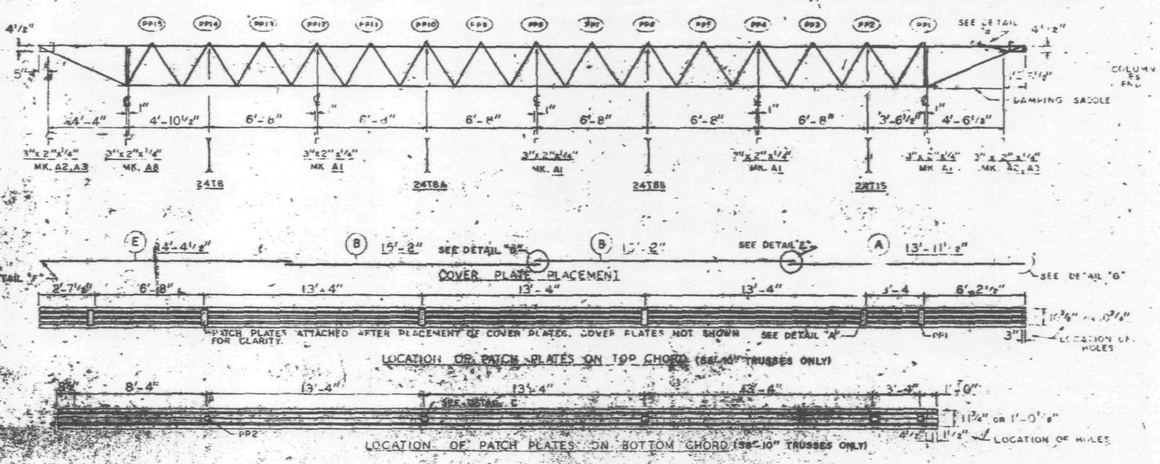


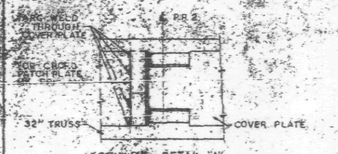
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

	MK.	PCS.	SIZE	W.O.
	CF	1	C32T2 - 59'-2"	ST 20CF
	T3	1	C32T3 - 58'-10"	ST 203
	T9	1	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
TRUSSES	T8	1	24T8 - 18'-10"	ST 208
	T8A	1	24T8A - 18'-11"	ST 208A
	T8B	1	24T8B - 18'-11"	ST 208B
	T15	1	24T15 - 18'-11"	ST 215
3" x 2" x ¼" ANGLE	A1	4	3" x 2" x ¼" x 19'-11"	ST 403
	A2	4	3" x 2" x ¼" x 5'-11½"	ST 403
	A3	2	3" x 2" x ¼" x 5'-11½"	ST 403
	A4	1	3" x 2" x ¼" x 13'-3"	ST 403
	A8	1	3" x 2" x ¼" x 6'-8½"	ST 403
DIAGONAL FLATS	F1	6	2" x 5⅝" x 8'-8"	ST 402
	A	2	¾" x .0135" x 13'-11"	ST 303
	B	2	6" x .0135" x 15'-2"	ST 303
	C	3	4" x .0135" x 14'-6"	ST 303
ANGLE CLIPS	C1	20	2" x 2½" x ¼" x 0'-8"	ST 401
	C2	4	2½" x 10½" x ¼" x 6"	ST 401
ANGLE CLIPS	C3	2	3½" x 9½" x ¾" x 3'-0½"	ST 298
	C3-3	1	3" x 9½" x ¾" x 3'-0½"	ST 298
CONNECTION PAD	CB1	1	½" ϕ x 1'-3"	ST 400
	CB2	6	¾" ϕ x 1'-3"	ST 400
	CB7	8	¾" ϕ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3'-2" x ⅜" x 6'-2"	ST 400
	P2	1	4'-2" x .39" x 0'-9"	ST 400
	P3	1	4'-2" x .39" x 1'-0"	ST 401
	P5	3	4'-2" x 1'-4" x 1'-6"	ST 400
	P6	1	4'-2" x .39" x 0'-9"	ST 401
⅞ SHEAR ANCHOR	SA2	6	⅞" ϕ STUD x 0'-4"	ST 400
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	18	3" x 3'-8" x 0'-9"	ST 400

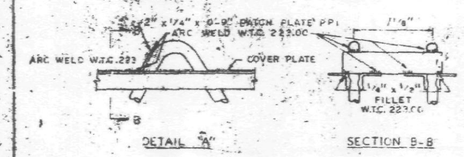
(1) ALL ARC WELD TO BE MADE WITH LOW HYD. ROD IN THE E-70 SERIES OR "EQUAL".

(2) UNLESS OTHERWISE SHOWN, ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

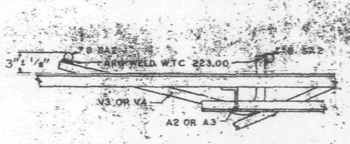




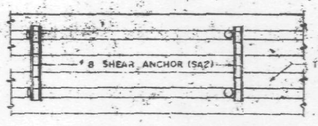
TOP VIEW - DETAIL "A"



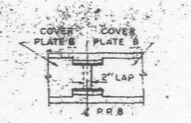
DETAIL "A" SECTION B-B



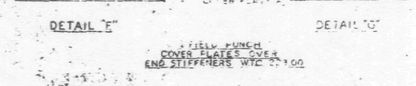
DETAIL "B"



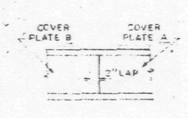
TOP VIEW - DETAIL "B"



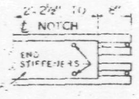
DETAIL "D"



DETAIL "E"

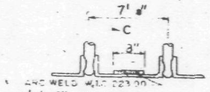


DETAIL "E"

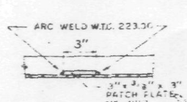


DETAIL "D"

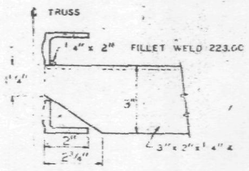
SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION

REF. DRWGS.

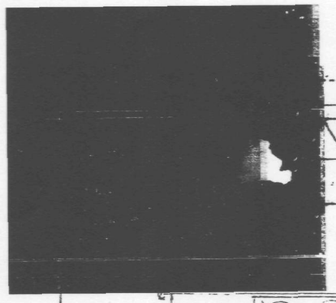
7-A62-3 & 10	7-22-68
7-A63-12	10-15-68
7-A84-1, 3, 11	1-3-68
7-A64-15 & 16	7-22-68
7-A84-42	10-15-68
GA-124	10-17-68
7-A81-3	7-22-68
7-A81-6, 7 & 8	7-22-68

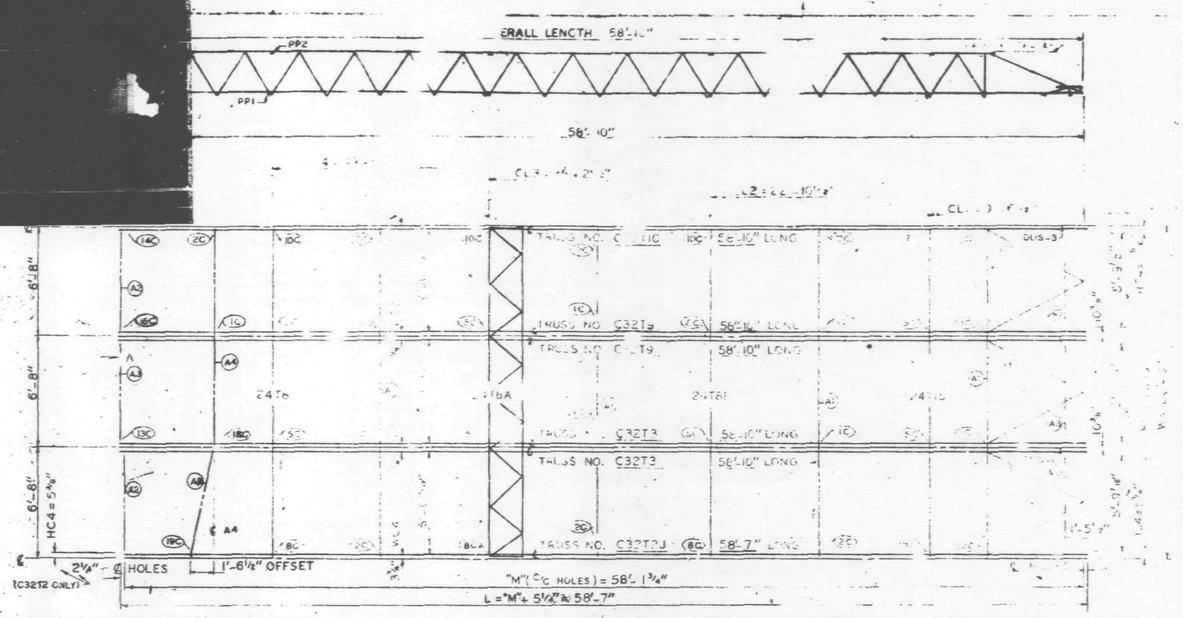
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
SLAB A FLOOR 47-48, 70-71 (N)
PANEL ERIF - 20' x 59'-2"

FABRICATION BY JACLENE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
SHOP FABRICATION DONE IN BONNEY
DATE 11/20/68
FIELD ERECTION BY
DATE FIELD FABRICATED
ERECTED BY CLARK WEBER

DESIGN DRAWING NO. 7-A83-12 10-15-68
DRAWN BY J.G.C.
DATE NOV 4 1968
CHECKED BY T.M.CHUNA
DATE NOV 5 1968
FABRICATION CONT. NO. W.T.C. 221
PLATE
SHEET NO. FP ERIF

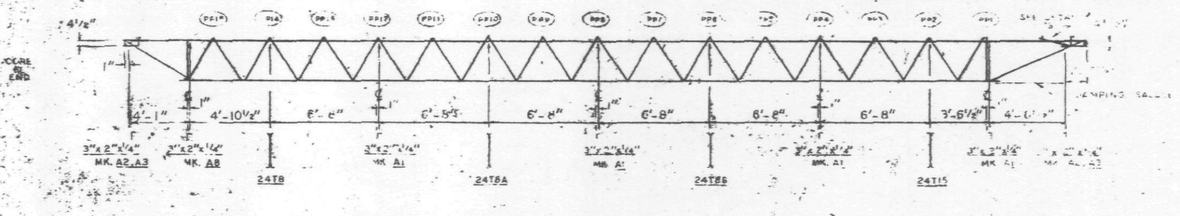


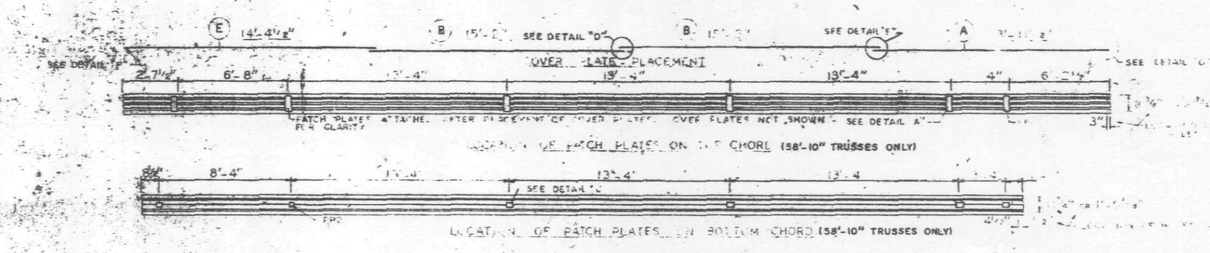


DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIJ SIZE 20' x 58'-7"

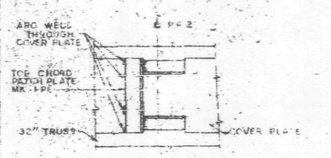
CONNECTION 9C & 19C SHOWN ON SHEET CD204.
SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



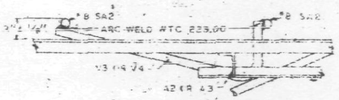


LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

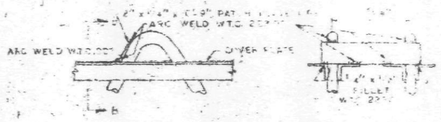


TOP VIEW - DETAIL "A"



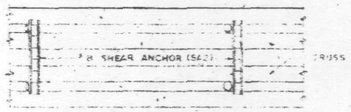
DETAIL "B"

DETAIL

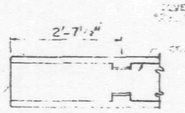


DETAIL "A"

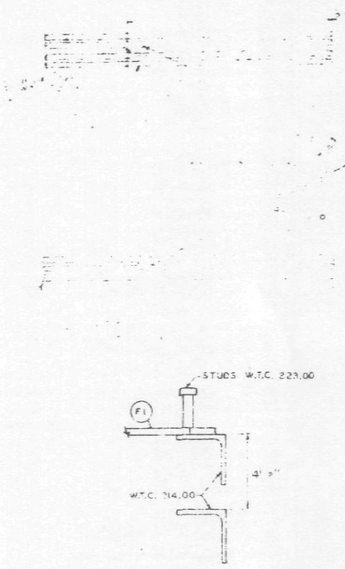
SECTION



TOP VIEW - DETAIL "B"



DETAIL "E"

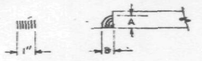


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

	C J		8.7"	J
			58'-10"	ST 203
		32T1	58'-10"	ST 209
		C32	58'-10"	210
		4T	40'-11½"	208
	PA	4TEA		ST 208A
	PB	24TPB		ST 208B
				403
	A4	3" x 2"	x 13'-3"	ST 403
		½" x 2½"	x 6'-8½"	ST 405
	F1	1"	8'-6" 8	ST 402
				ST 3
				ST 3
ANGLE CLIPS		20		ST
		4	½"	ST 4
				ST 498
				ST 498
				ST 400
			⅜" Ø x 3"	ST 400
		6	⅜" Ø x 1'-5"	ST 400
	P1	5	3" x 3" x 8'-2"	ST 400
	P2	1	4" x 39" x 0'-9"	ST 400
	P3	1	4" x 39" x 1'-0"	ST 400
	P5	3	4" x ½" x 6'-6"	ST 400
	P6	1	4" x 39" x 0'-9"	ST 401
SHEAR ANCHOR	SA2	6	8 HEAD x 0'-3"	ST 400
	PP1	18	2" x ¼" x 0'-9"	ST 400
PATCH PLATES	PP2	18	3" x ⅜" x 0'-7"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



NO.	DATE	REVISION	BY

	7-62-BB
	10-15-FB
	1-3 FB
	7-62-FB
	10-15-FB
	10-11-BB
	7-62-BB
	7-62-BB

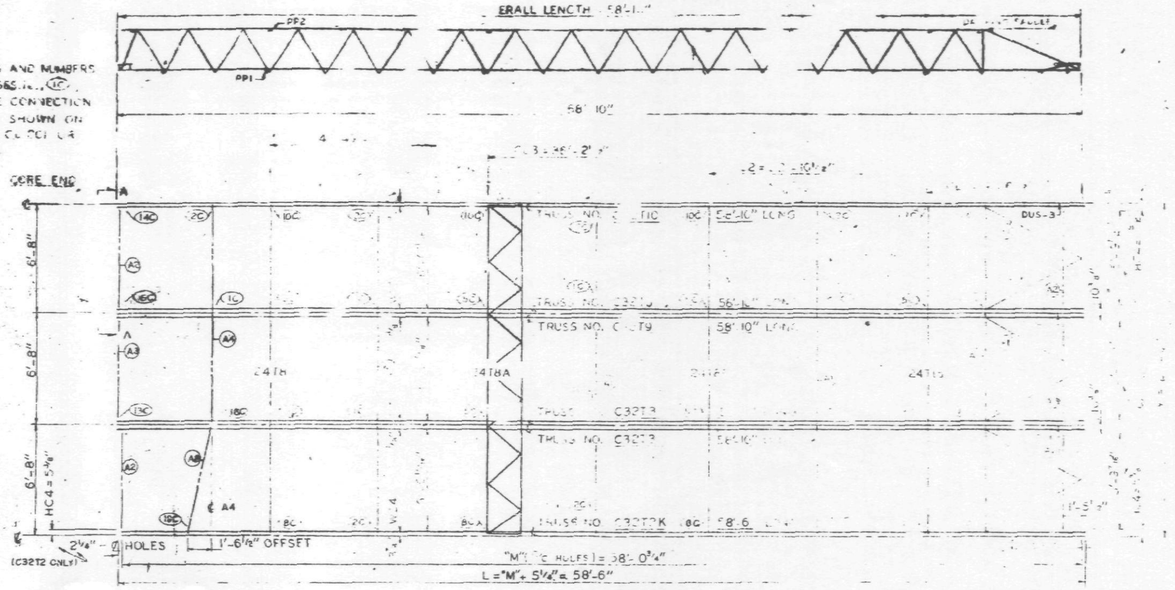
40 (N)

ERIJ 87

11/20/68

ERIJ

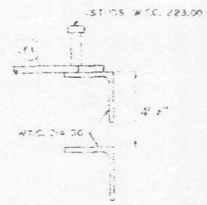
LETTERS AND NUMBERS IN ELLIPSES (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIK SIZE 20' x 58'-6"

CONNECTION C & 10C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 10C, 10C1 & 1K SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

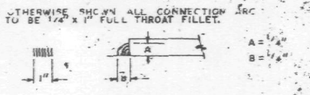


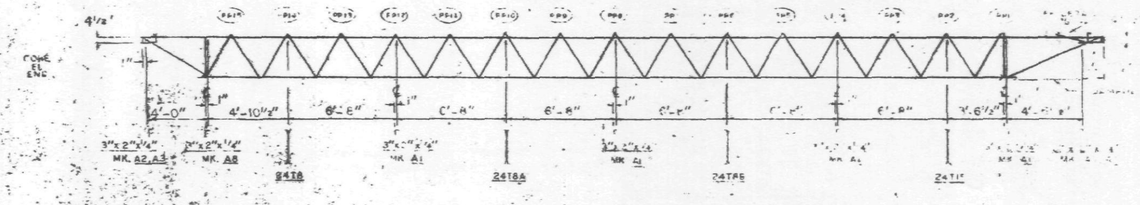
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

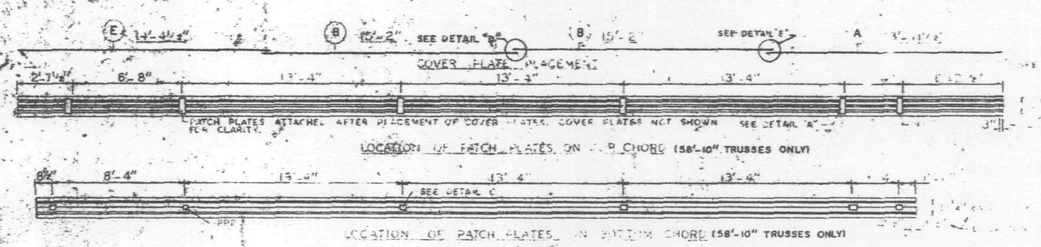
MK.	NO.	SIZE	LENGTH	WT.
			58'-10"	ST 203
			58'-10"	ST 209
			58'-10"	210
				208
				ST 208A
				ST 208B
				ST 403
				ST 405
				ST 402
				ST 406
				ST 401
				ST 400
P SHEAR ANCHOR	A2	6	8 HAS A 0'-3"	ST 400
	A3	18	3" x 2" x 0'-3"	ST 401
PATCH PLATES	A52	18	3" x 7⅛" x 1'-0"	ST 410
	P1	5	3' 2"x3' 8"x 6' 2"	ST 407
	P2	1	39"x 0' 9"	ST 407
	P3	1	39" x 1'-0"	ST 407
	P4	3	2" x 1'-6"	ST 400
	P5	1	2" x 39" x 0'-9"	ST 401

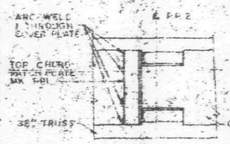
(1) ALL SHOP WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



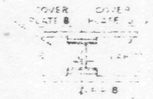


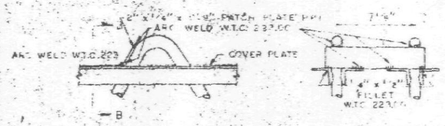




TOP VIEW - DETAIL "A"

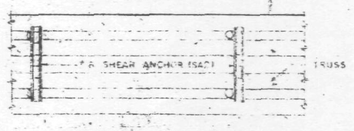
DETAIL "B"



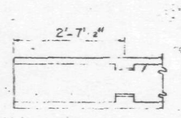


DETAIL "A"

SECTION B-B



TOP VIEW - DETAIL "B"



DETAIL "F"

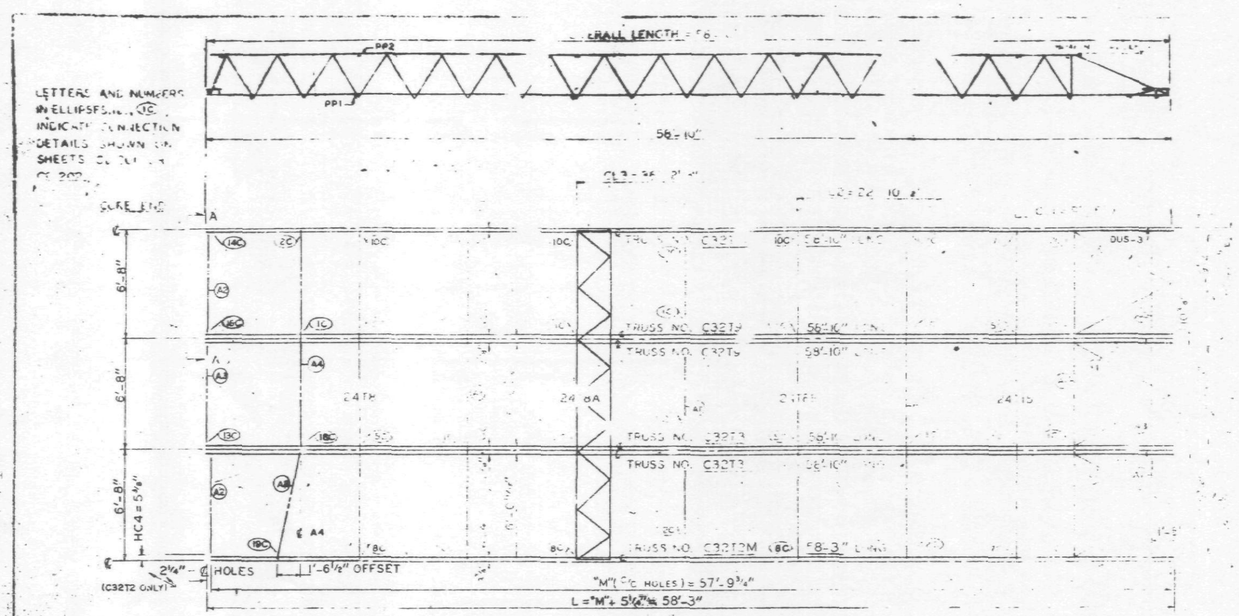
NO.	DATE	REVISION	BY

45-46 (N)

EFIK 86

11/20/68

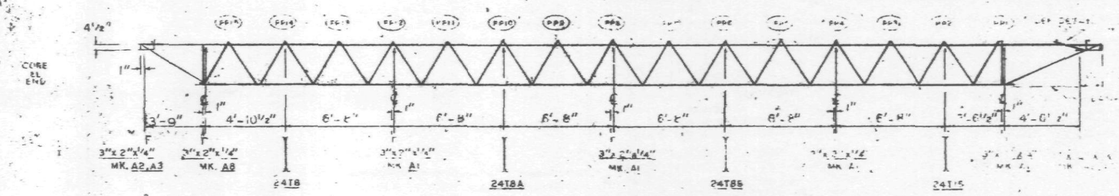
FF EFIK

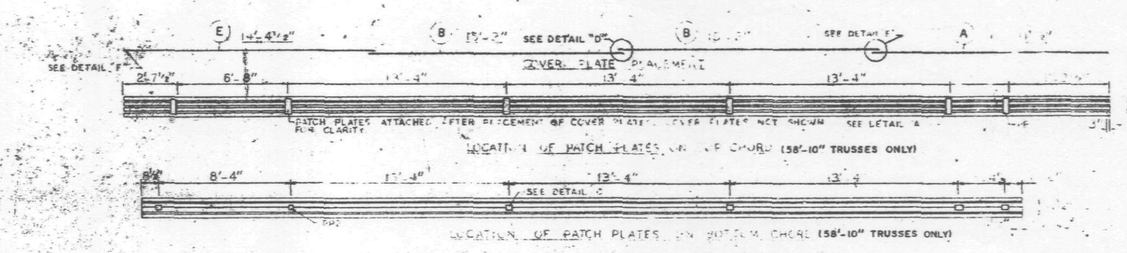


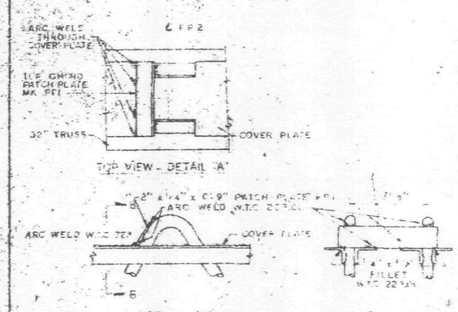
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

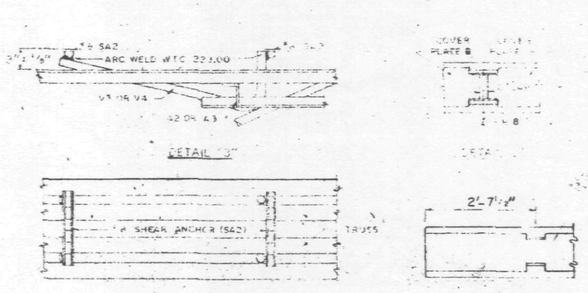
PANEL NO. ERIM SIZE 20' x 58'-3"

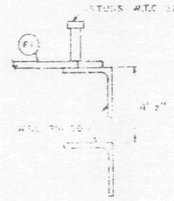
CONNECTION 1C, 3, 10C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 12C, 16C & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



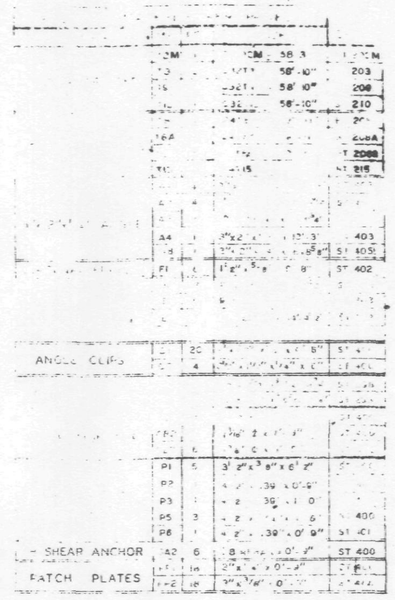








CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



(1) ALL ARC WELD TO BE MADE WITH LOW HY. HOOKEN RODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

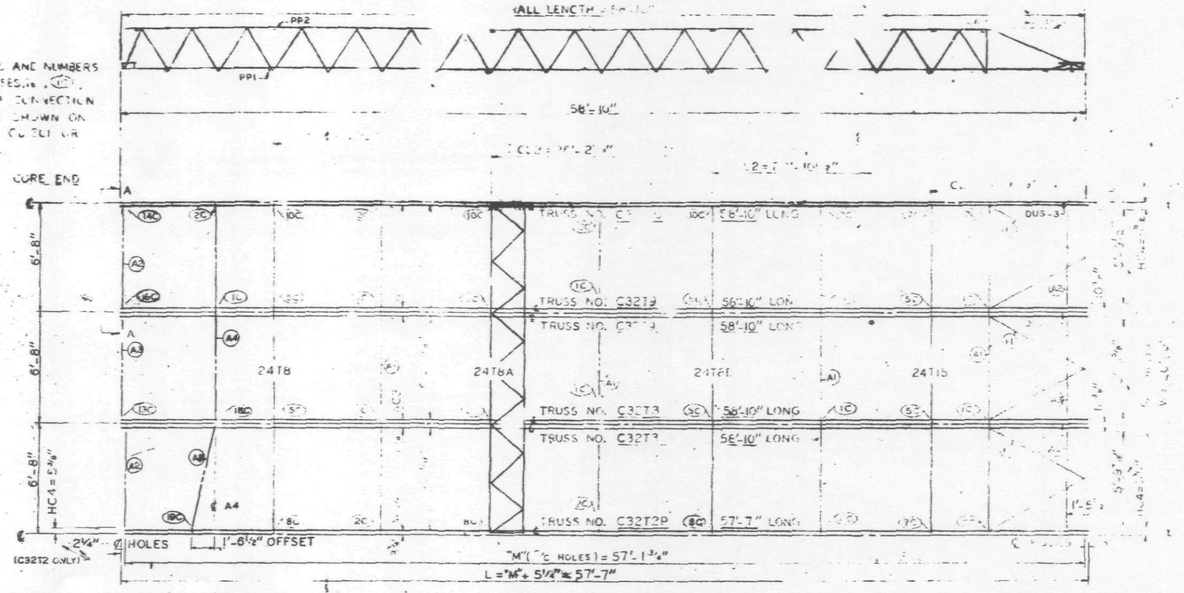
72-73 (N)

ERIM 8 3

11/20/68

ERIM

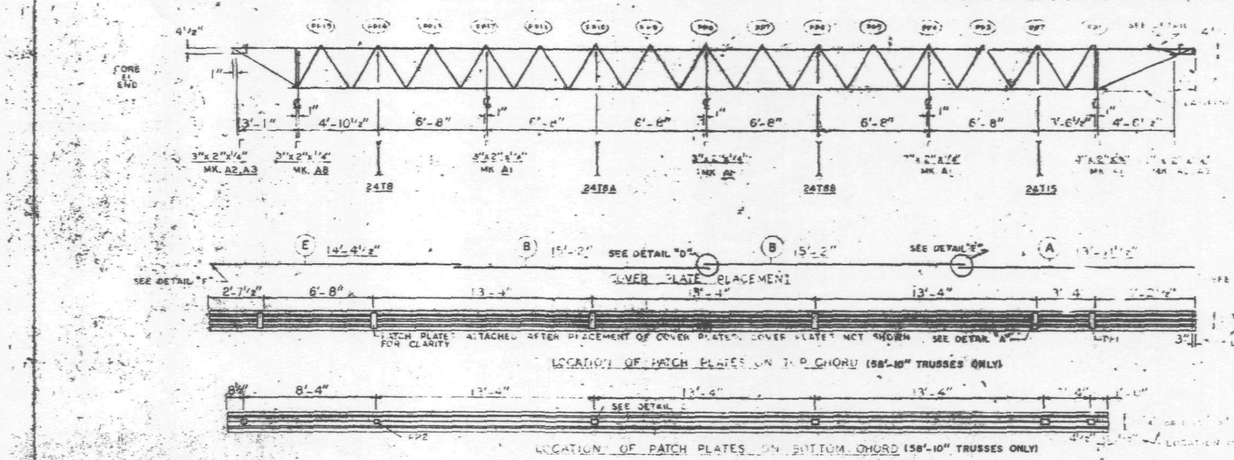
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 207 OR CD 208.

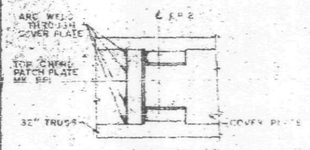


DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

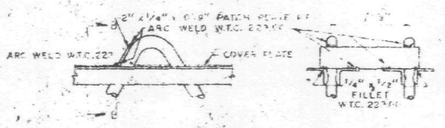
PANEL NO. E1RIP SIZE 20' x 57'-7"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209; CD 208 & CD 207, RESPECTIVELY.

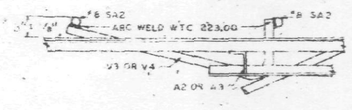




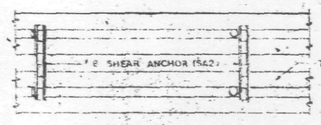
TOP VIEW - DETAIL "A"



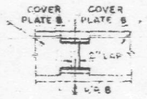
DETAIL "A" SECTION B-B



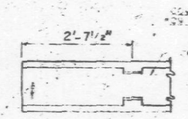
DETAIL "B"



TOP VIEW - DETAIL "B"

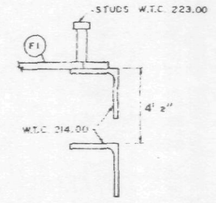


DETAIL "C"

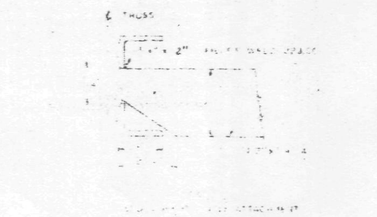


DETAIL "F"

FIELD WELD EACH COVER PLATE TO COVER END STIFFENER WITH



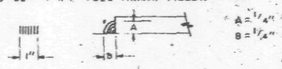
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



	2P		7-7	
			58'-10"	203
			58'-10"	209
			58'-10"	ST 210
				208
				208A
				ST 208B
	TC			ST 215
			3"x2"x ¼" x 13"	ST 401
				ST 405
	F1	5	1'-8" x 8" x 6-3	ST 402
ANGLE CLIPS		20		ST 401
		4		ST 401
				ST 228
				ST 227
		6		ST 400
	P1	5	3' 2" x 3' 8" x 6' 2"	ST 401
	P2	1	4'-7" x .39" x 0'-9"	ST 400
	P3	1	2' x .39" x 1'-0"	ST 400
	P5	3	2' x ¼" x 1'-6"	ST 400
	P8	1	4'-2" x .39" x 0'-9"	ST 401
⅞ SHEAR ANCHOR	SA2	6	8" x ¼" x 0'-4"	ST 400
PATCH PLATES	PP1	16	2'-4" x ¼" x 0'-9"	ST 400
	PP2	18	3'-4" x ¼" x 0'-9"	ST 400

(1) ALL F4C WELD TO BE MADE WITH LOW HY. IRON RODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.



NO.	DATE	REVISION
		7-22-68
		10-15-68
		1-3-69
		7-22-69
		10-15-68
		10-11-68
		7-22-68
		7-22-68

74 (N)

EIRIP 7 7

James White 11/20/68

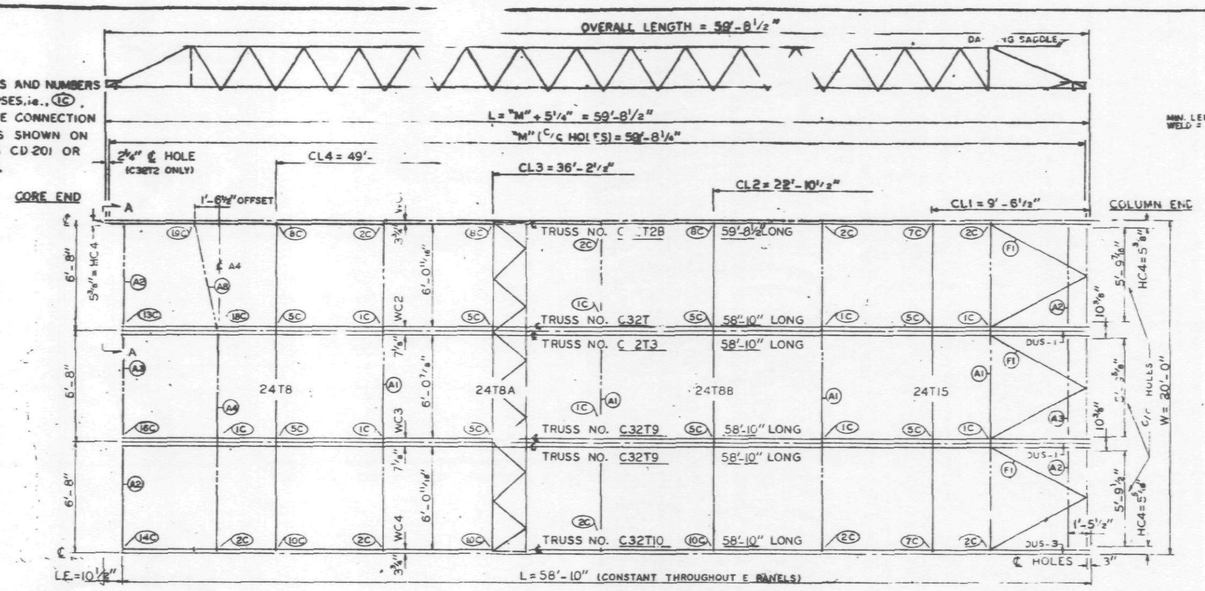
NOV 4 1968

NOV 5 1968

ATC 221

FP EHIP

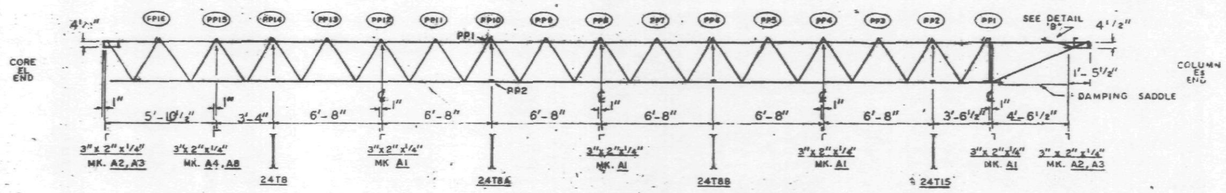
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

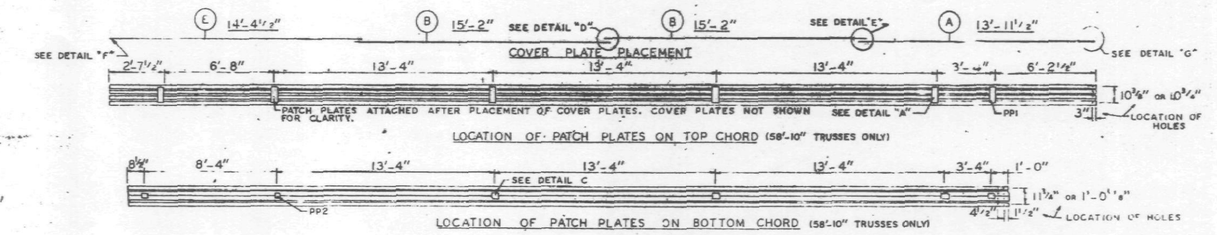


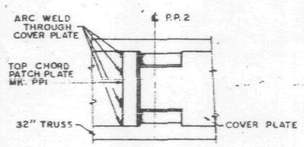
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1B SIZE 20' x 59'-8 1/2"

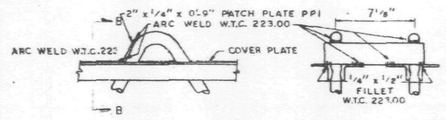
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



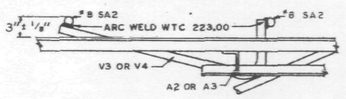




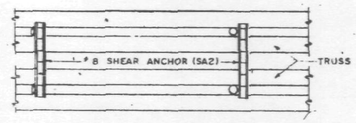
TOP VIEW - DETAIL "A"



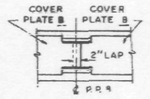
DETAIL "A" SECTION B-B



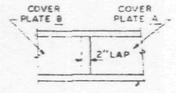
DETAIL "B"



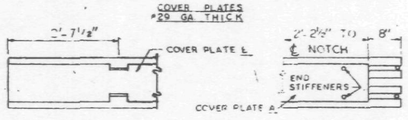
TOP VIEW - DETAIL "B"



DETAIL "D"

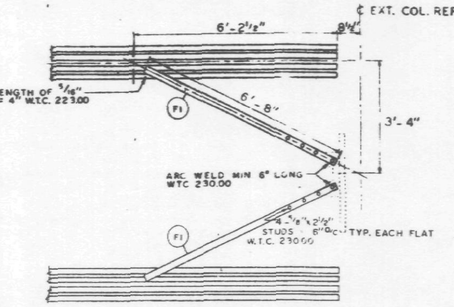


DETAIL "E"

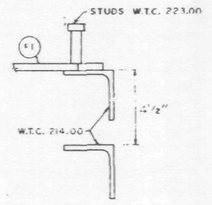


DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

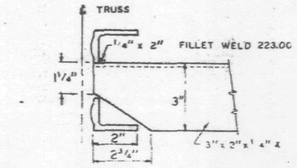


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

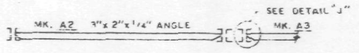
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T2B	1	C32T2B - 59'-8 1/2"	ST 208B
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" - x 19'-11"	ST 413
	A2	4	x 2" x 1/4" x 5'-1 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-1 3/4"	ST 403
	A4	1	3" x 2" x 1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-3 3/4"	ST 405
DIAGONAL FLATS	F1	6	11 1/2" x 5/16" x 6'-8"	ST 402
COVER PLATES	A	3	9" x .135" x 13'-11 7/8"	ST 303
	B	8	9" x .135" x 15'-2"	ST 303
	E	1	9" x .0135" x 14'-4 1/8"	ST 303
ANGLE CLIPS	C1	20	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-2	2	3 1/2" x 3 1/2" x 3/4" x 3'-6 3/8"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/4" x 3'-6 3/8"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	3/16" ϕ x 1'-3"	ST 400
	CB3	6	15/16" ϕ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3 1/2" x 3/8" x 1'-1 1/2"	ST 400
	F2	1	4'-2" x 3/8" x 1'-0"	ST 400
	F3	1	4'-2" x 3/8" x 1'-0"	ST 400
	F5	3	4'-2" x 1 1/4" x 1'-6"	ST 400
	PF	1	4'-2" x .120" x 6'-9"	ST 401
#8 SHEAR STUD TOP	SA2	6	# 8 STUD AR x 0'-4"	ST 400
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

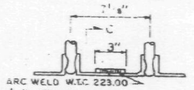
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



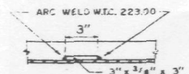
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO.	DATE	REVISION	BY

REF. DRWGS.

7-A82-3 & 10	7-22-68
7-A83-11	7-22-68
7-A84-3, 3.1	1-3-68
7-A84-15 & 16, 39	7-22-68
7-A84-42	10-15-68
SA-124	10-11-68
7-A81-3	7-22-68
7-A81-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 84-91, 93-106 (N)

PANEL E1B - 20' x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY P.O.N.Y.A. DATE 11/15/68

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

DETAILED BY K. EARL WEBER

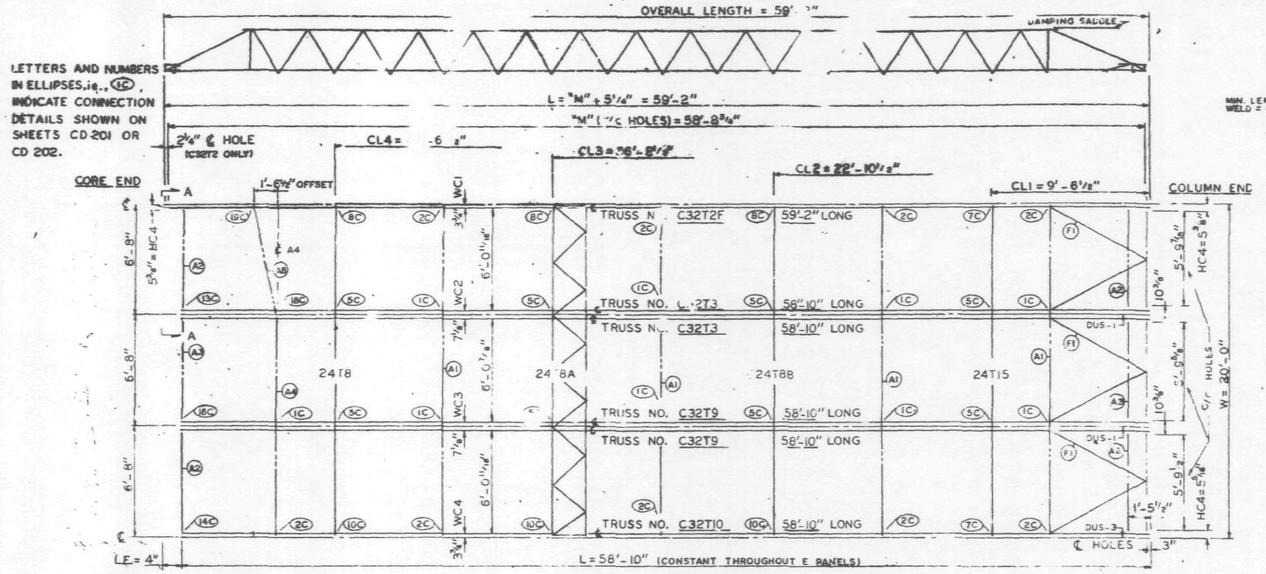
DESIGN DRAWING NO. 7-A83-11 7-22-68 PLATE

DRAWN BY A.D.C. DATE NOV. 1, 1968

CHECKED BY T.M.CHURA IN CHARGE OF DATE NOV. 4, 1968 PROJ. DEV.

FABRICATION CONT. NO. W.T.C. 221

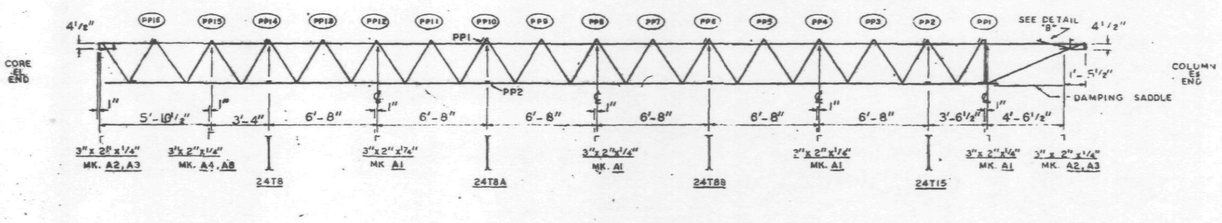
SHEET NO. FP E1B

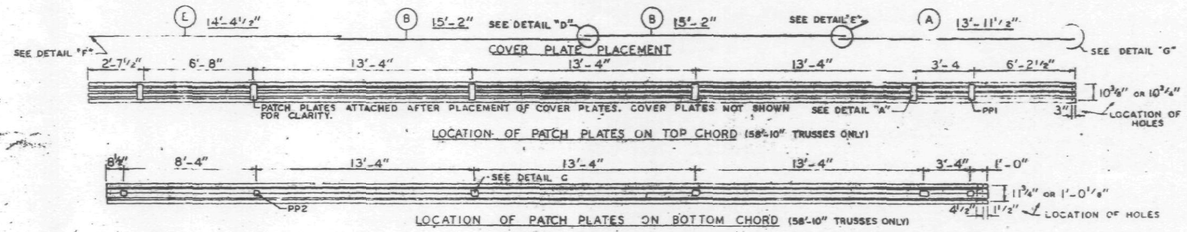


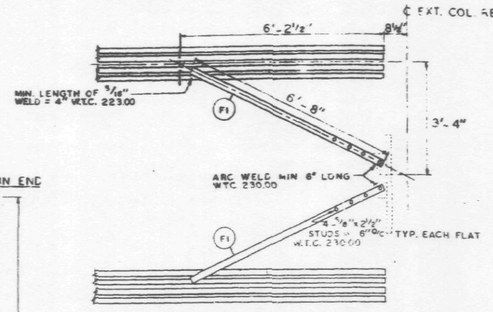
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1F SIZE 20' x 59'-2"

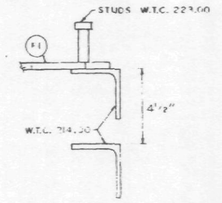
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

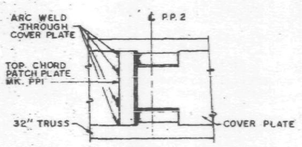


CLIP ANGLE LOCATION FOR DIAGONAL FLATS. 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

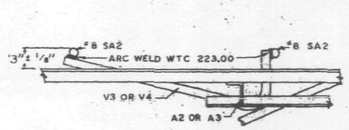
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	DWG
FLOOR TRUSSES	T2F	1	C32T2F - 59'-2"	ST 202F
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-	ST 208
	T8A	1	24T8A 19'-11"	ST 208A
	T8B	1	24T - 19'-11"	ST 208B
	T15	1	2 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	1	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" - 7 1/8"	ST 103
	A3	2	3" x 2" x 1/4" - 5'-11 5/8"	ST 403
	A4	1	3" x 2" x 1/4" x 15'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-3 5/8"	ST 403
DIAGONAL FLATS	F1	6	2" x 5/8" x 6'-9"	ST 402
COVER PLATES	A	3	2" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 14'-4 1/2"	ST 303
EDGE CLIP	C1	20	2" x 1 1/2" x 1 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1 1/4" x 8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-6 1/8"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3'-6 1/8"	ST 298
CONNECTION BAR	CB1	1	1" ℄ x 1'-3"	ST 400
	CB2	6	1 3/16" ℄ x 1'-3"	ST 400
	CB3	6	1 3/16" ℄ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-11"	ST 400
	P2	1	4 1/2" x 3d" x 0'-9"	ST 400
	P3	1	4 1/2" x 3d" x 1'-0"	ST 400
	P5	3	4 1/2" x 1 1/4" x 1'-6"	ST 400
	P7	1	4 1/2" x 3d" x 0'-9"	ST 401
3/8" SHEAR ANCHOR	SA2	6	3/8" ø HEADED x 0'-4"	ST 410
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

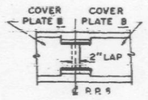
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/2" x 1" FULL THROAT FILLET.



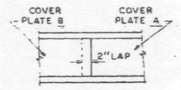
TOP VIEW - DETAIL "A"



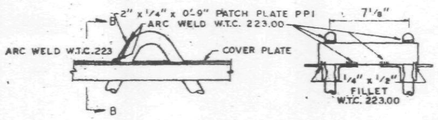
DETAIL "B"



DETAIL "D"

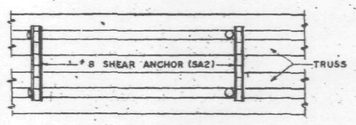


DETAIL "E"

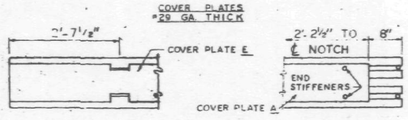


DETAIL "A"

SECTION B-B

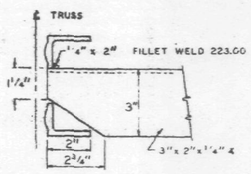


TOP VIEW - DETAIL "B"

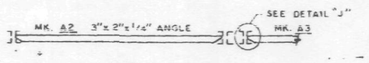


DETAIL "F" DETAIL "G"

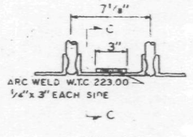
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



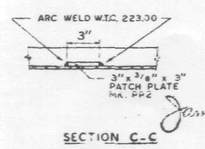
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 10	7-22-68
7-AB3-11	7-22-68
7-AB4-3, 3.1	1-3-68
7-AB4-15 & 16-39	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48, 70-71 (N)

PANEL E1F - 20' x 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION FOR PONYA. DATE 11/15/68

APPROVED FOR FABRICATION BY _____ FOR FABRICATOR DATE _____

DETAILED BY A. CARL WEBER

DESIGN DRAWING NO. 7-AB3-11 7-22-68

DRAWN BY gdc DATE NOV. 1, 1968

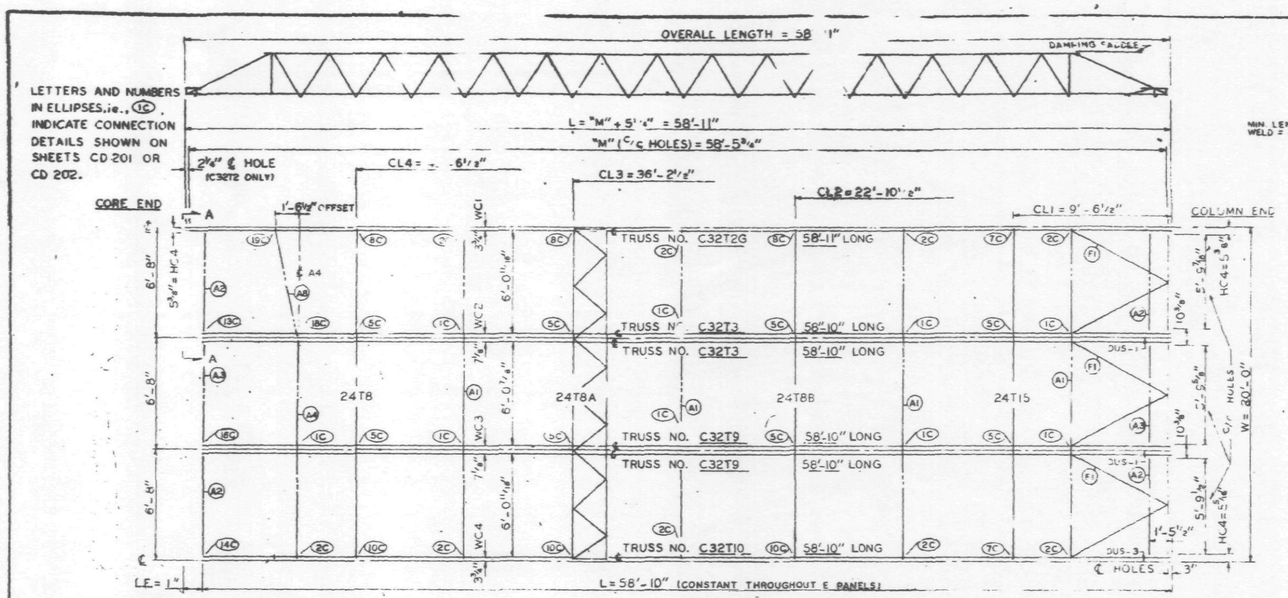
CHECKED BY T.M. CHUBA DATE NOV. 4, 1968

FABRICATION CONT. NO. W.T.C. 221

PLATE

IN CHARGE OF PROJ. DEV.

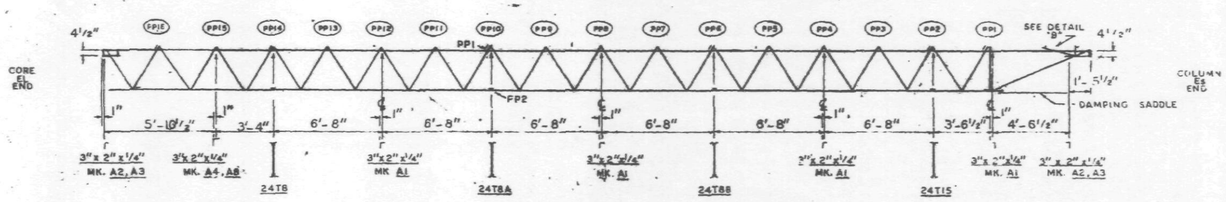
SHEET NO. FP E1F

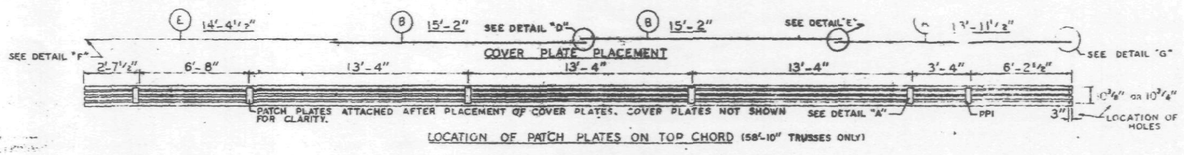


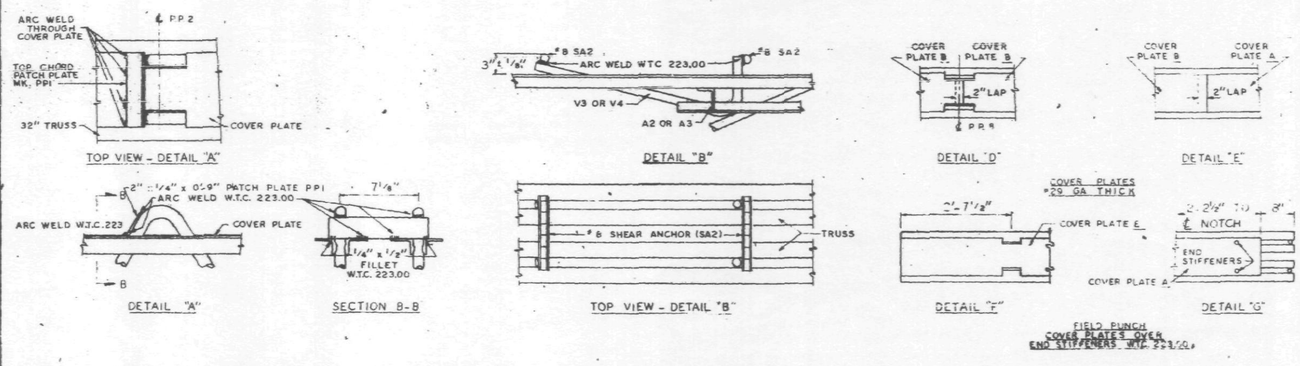
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

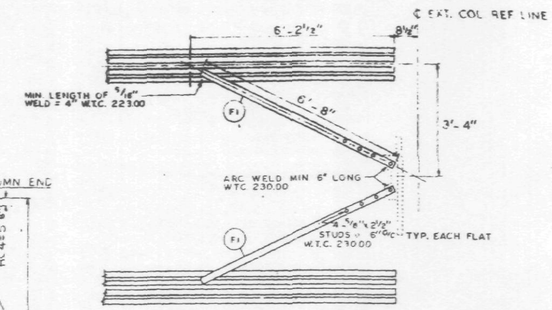
PANEL NO. E1G SIZE 20' x 58'-11"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

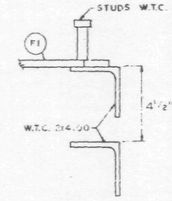








TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED BACK TO BACK BY W.T.C. 223.00

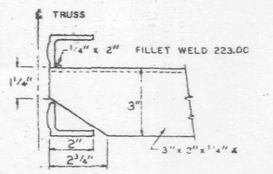


SEAT ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T2G	1	C32T2G - 58'-11"	ST 202G
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A4	1	3" x 2" x 1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-5 3/8"	ST 405
DIAGONAL FLATS	F1	6	1 1/2" x 5/16" x 6'-8"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	L	3	9" x .0135" x 14'-2 1/2"	ST 303
ANGLE CLIPS	C1	20	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-6 3/4"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/16" x 3'-6 3/4"	ST 298
CONNECTION BAR	CB1	1	1" ¢ x 1'-3"	ST 400
	CB2	6	13/16" ¢ x 1'-3"	ST 400
	CB3	6	13/16" ¢ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	F2	1	4 1/2" x .34" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	F5	5	4 1/2" x 1/4" x 1'-8"	ST 400
	PC	1	4 1/2" x .34" x 6'-9"	ST 401
"B" SHEAR ANCHOR	SA2	6	"B" HEADED x 0'-9"	ST 406
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 480

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROCEN RODS IN THE E-70 SERIES OR 8018B1.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULET THROAT FILLET.



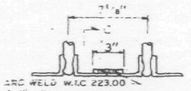
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY

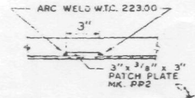
REF. DRWGS.

7-AB2-3 & 10	7-22-68
7-AB3-11	7-22-68
7-AB4-3, 3.1	1-3-68
7-AB4-15 & 16, 39	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



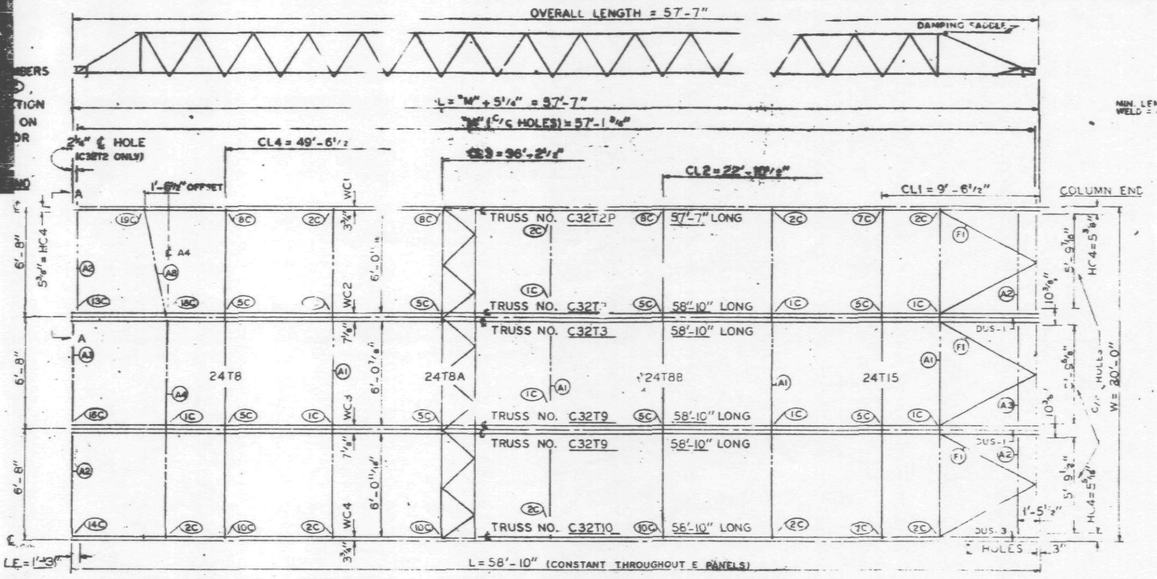
SECTION C-C

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N&S)

PANEL E1G - 20' x 58'-11"

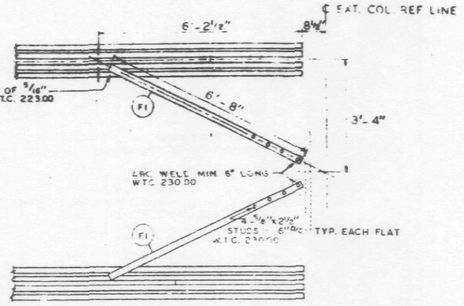
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR P.O.N.Y.A. — DATE 11/14/68
APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE
DETAILED BY A. CARL WEBER
DESIGN DRAWING NO. 7-AB3-11 7-22-68
DRAWN BY gdc DATE NOV. 1, 1968
CHECKED BY T.M. CHURA DATE NOV. 4, 1968
FABRICATION CONT. NO. W.T.C. 221
PLATE
IN CHARGE OF PROD. DEV.
SHEET NO. FP E1G



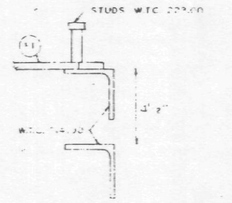
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. EIP SIZE 20' x 57'-7"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD AT COMMON END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

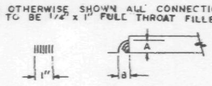


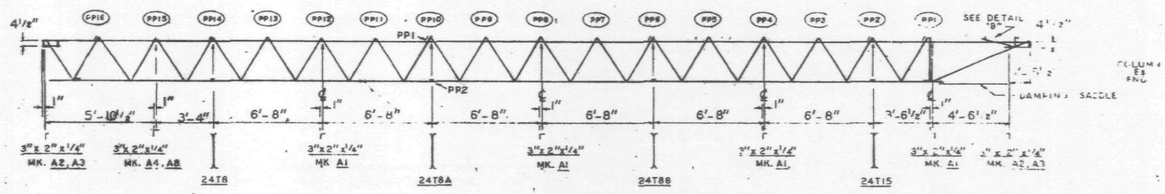
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

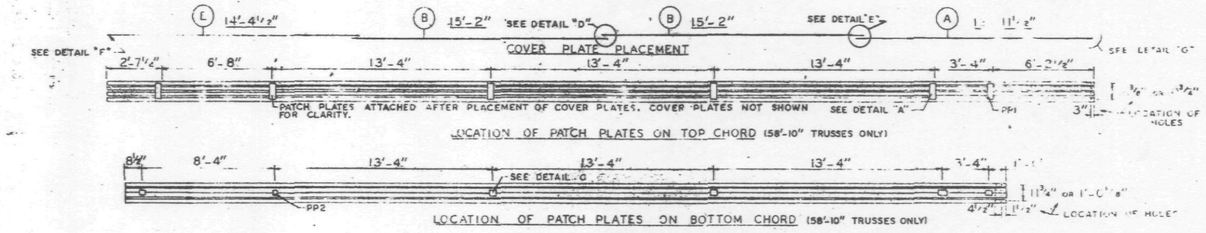
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T2P	1	C32T2P - 57'-7"	ST 202P
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 18'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 15/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 15/16"	ST 403
	A4	1	3" x 2" x 1/4" x 1'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-6 3/4"	ST 403
DIAGONAL FLATS	A5	2	11" x 5" x 3/8" - 6'-9"	ST 402
COVER PLATES	A	3	9" x 5" x .1345" x 13'-11 7/8"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	2	9" x .0135" x 14'-6 1/2"	ST 303
ARC WELD CLIPS	C1	20	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DS	2	3 1/2" x 3 1/2" x 3/4" x 3'-6 1/4"	ST 298
	DS-3	1	3 1/2" x 3 1/2" x 3/4" x 3'-6 1/4"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	3/4" ϕ x 1'-3"	ST 400
	CB3	6	1 3/8" ϕ x 1'-5"	ST 400
CONNECTION PLATES	PP	5	3" x 3" x 5/8"	ST 400
	PP1	1	4'-2" x 1 3/4" x 0'-9"	ST 400
	PP2	1	4'-2" x 1 3/4" x 0'-9"	ST 400
	PP5	3	4'-2" x 1/4" x 1'-6"	ST 400
	PP7	1	4'-2" x 1 3/4" x 0'-9"	ST 401
7/8 SHEAR ANCHOR	SA2	6	7/8 SHEAR x 0'-6"	ST 400
PATCH PLATES	PP1	18	2" x 1 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/16" x 0'-9"	ST 400

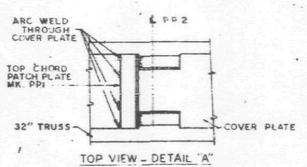
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

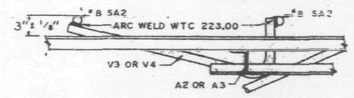




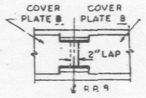




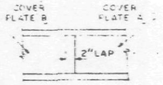
TOP VIEW - DETAIL "A"



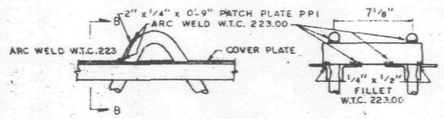
DETAIL "B"



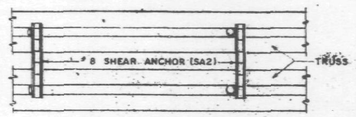
DETAIL "D"



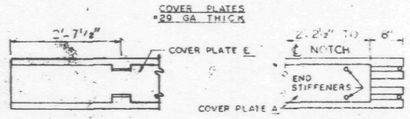
DETAIL "E"



DETAIL "A" SECTION B-B

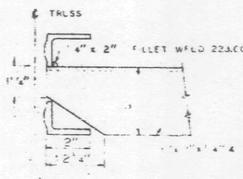


TOP VIEW - DETAIL "B"

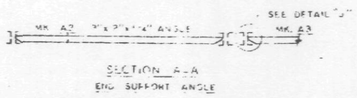


DETAIL "F" DETAIL "G"

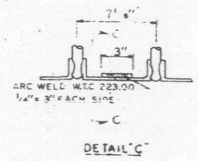
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



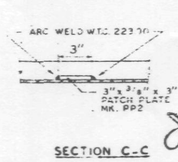
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

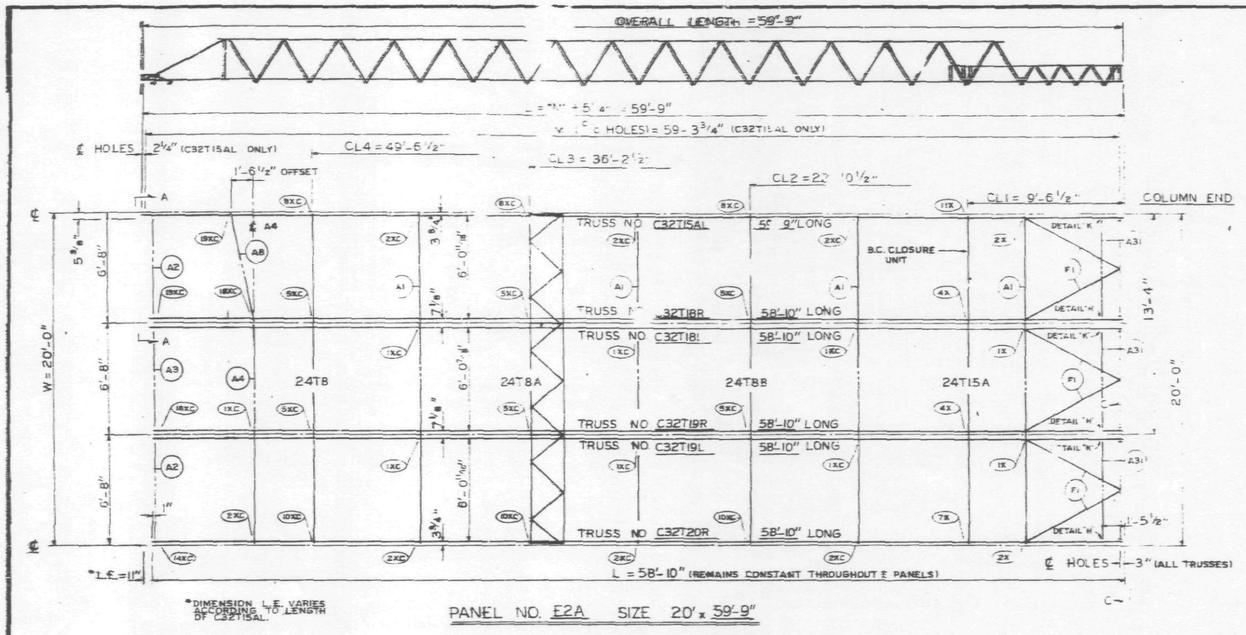
NO	DATE	REVISION	BY

SHOP DRWGS.	7-AB2-3 & 10	7-22-68
	7-AB2-11	7-22-68
	7-AB4-1, 3, 11	1-3-68
	7-AB4-15 & 16, 39	7-22-68
	7-AB4-42	10-15-68
	7-AB-24	10-11-68
	7-AB-3	7-22-68
	7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 74 (N)
PANEL EIP - 20' x 57'-7"

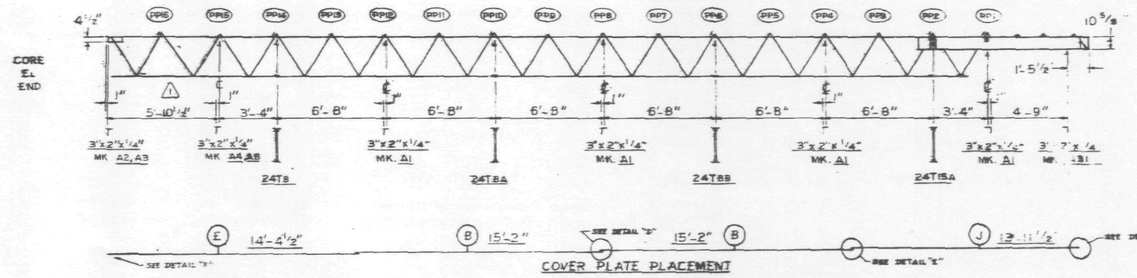
FABRICATION BY LACLEDE STEEL COMPANY

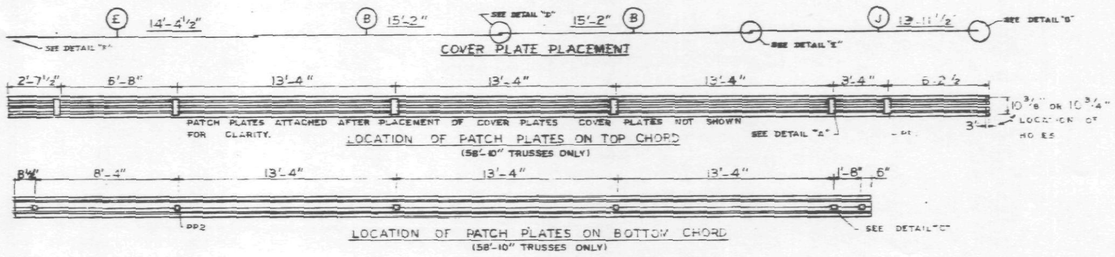
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7 AB3-11 7-22-68	PLATE
APPROVED FOR FABRICATION BY [signature] FOR PONYA	DATE 11/15/68	DRAWN BY gdc DATE NOV. 1, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE NOV. 4, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT NO W.T.C. 221	SHEET NO. FP EIP

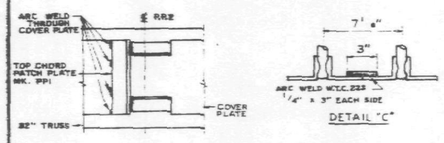


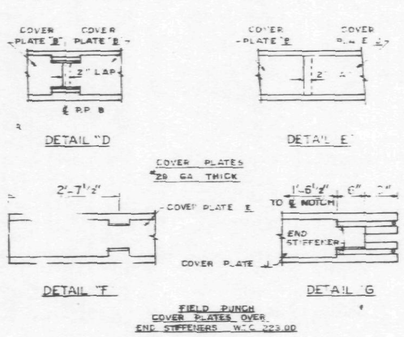
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T15AL.

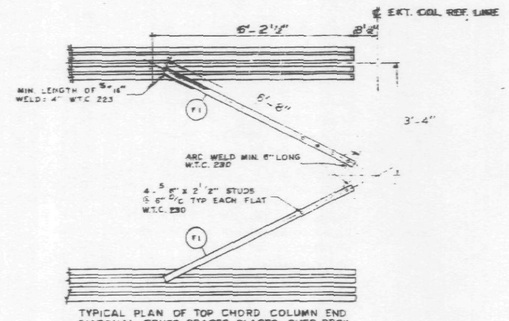
PANEL NO. E2A SIZE 20' x 59'-9"



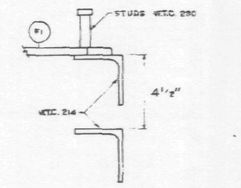








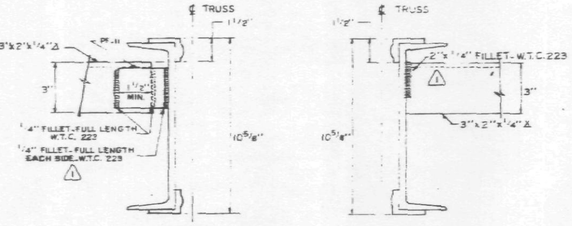
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

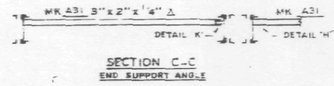


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

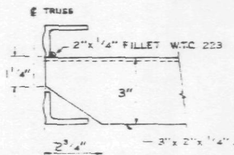
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T15AL	1	C32T15AL x 59'-9"	ST 215AL
	T18I	1	C32T18I x 58'-10"	ST 218I
	T18R	1	C32T18R x 58'-10"	ST 218R
	T19R	1	C32T19R x 58'-10"	ST 219R
	T19L	1	C32T19L x 58'-10"	ST 219L
	T20R	1	C32T20R x 58'-10"	ST 220L
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	ST 208
	T8A	1	24T8 x 19'-11"	ST 208
	T8B	1	24T8B x 19'-11"	ST 208
	T15A	1	24T15A x 19'-11"	ST 215A
3"x 2"x ¼" ANGLE	A1	4	3"x2"x¼"x 19'-0"	ST 403
	A2	2	3"x2"x¼"x5'-5"	ST 403
	A3	1	3"x2"x¼"x5'-4"	ST 403
	A4	1	3"x2"x¼"x13'-3"	ST 403
	A8	1	3"x2"x¼"x8'-8⅜"	ST 405
	A31	3	3"x2"x¼"x5'-8⅛"	ST 410
CLOSURE PLATES	PF-11	3	3"x1¼"x0'-2¾"	ST 412
DIAGONAL FLATS	F1	6	1½"x3/8"x5'-8"	ST 402
PATCH PLATES	PP1	18	2"x¼"x0'-9"	ST 400
	PP2	18	3"x⅜"x0'-3"	ST 400
COVER PLATES	B	6	9"x.0135"x15'-2"	ST 303
	E	3	9"x.0135"x14'-4½"	ST 303
	J	3	9"x.0135"x13'-11½"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1¼"D x 6'-6½"	ST 215A
ANGLE CLIPS	C1	20	2"x1½"x.25"x6"	ST 400
	C2	4	2½"x1½"x.25"x6"	ST 400
⅞ SHEAR ANCHOR	SA2	0	⅞ REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
	CB2	6	1⅜" ø x 1'-3"	ST 400
	CB3	6	1⅜" ø x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3½"x⅜"x6½"	ST 400
	P2	1	4½"x.38"x0'-9"	ST 400
	P3	1	4½"x.38"x1'-0"	ST 400
	P5	3	4½"x¼"x1'-6"	ST 400
	P6	1	4½"x.38"x0'-9"	ST 401
	P9	6	3"x½"x1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie (JK).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x¼" FULL THROAT FILLET.

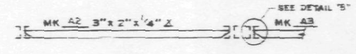




SECTION C-C
END SUPPORT ANGLE



DETAIL "B"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	B.D.C.

REF DRWG.

7-AB3-32	10-4-68
7-AB3-24	8-15-68
7-AB1-14, 17, 18 & 19	10-4-68
7-AB2-3	7-22-68
7-AB2-14	10-4-68
SA-124	10-11-68

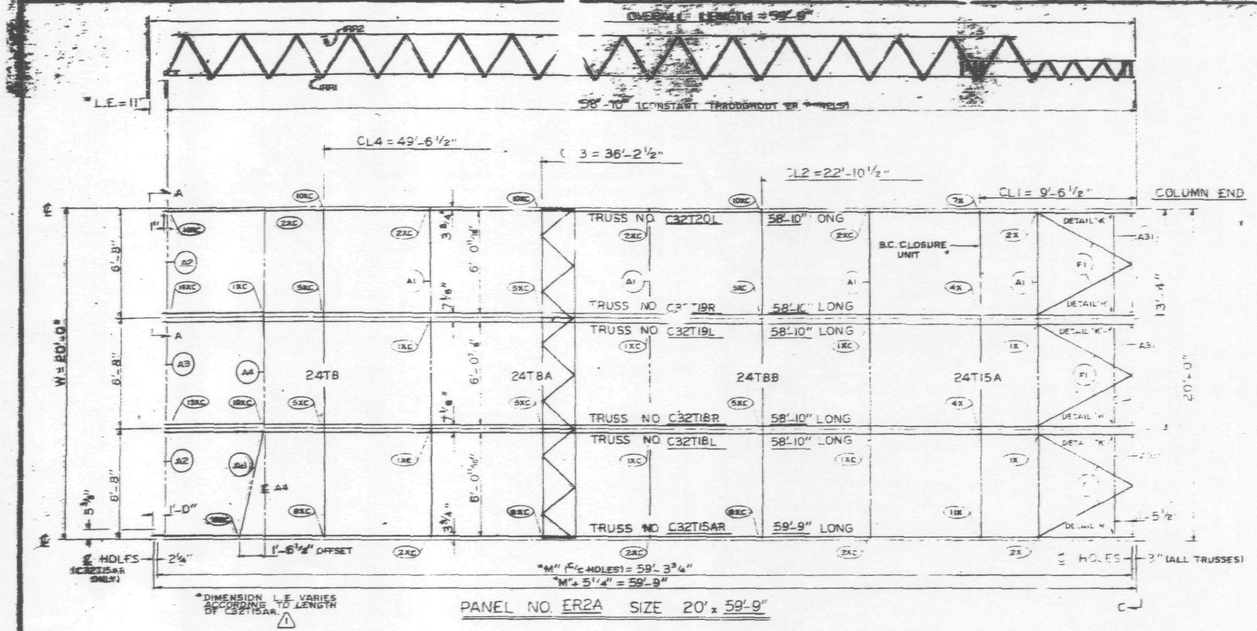
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

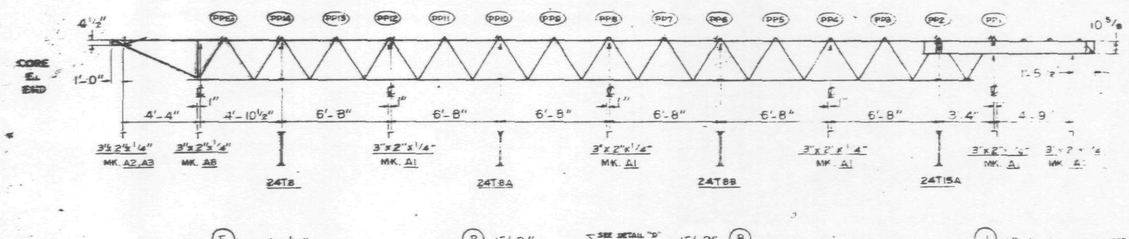
PANEL E2A - 20' x 59'-9"

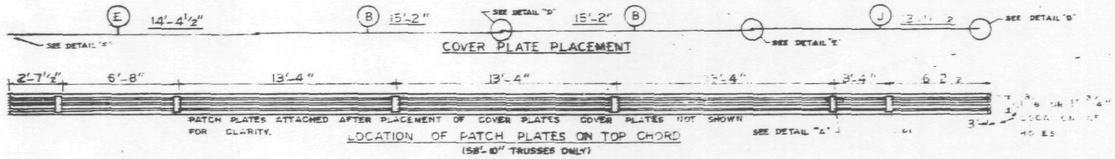
FABRICATION BY LACLEDE STEEL COMPANY.

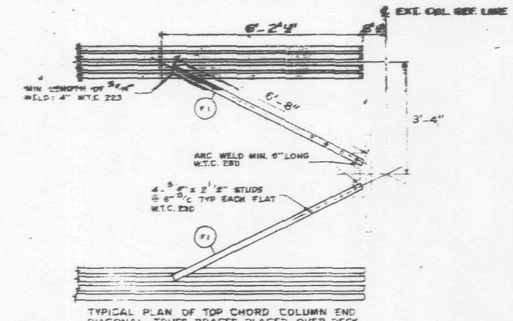
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-32	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE 2/28/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE DEC. 5, 1968	IN CHARGE OF PROJ. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO WT C. 221	SHEET NO FP E2A

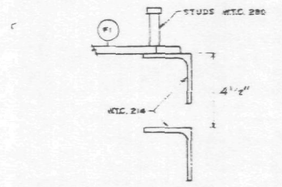


PANEL NO. ER2A SIZE 20' x 59'-9"



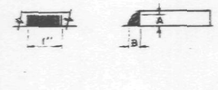


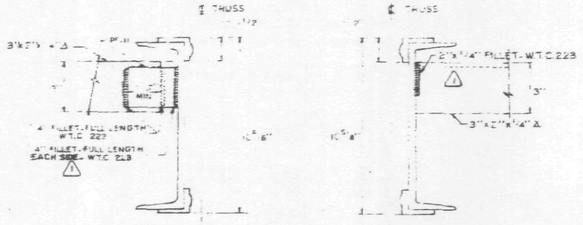


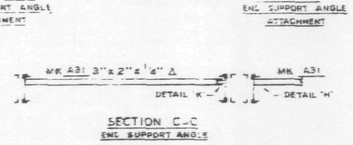


REQUIRED MATERIAL PER PANEL				REF. DWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	[illegible]	8	C32T20R x 58'-10"	ST 208A
	[illegible]	2	[illegible]	ST 208A
	[illegible]	2	[illegible]	ST 208
	[illegible]	4	[illegible]	ST
	T19A	1	C32T19R x 58'-10"	ST
	T20L	1	C32T20L x 58'-10"	ST 208A
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	ST 208
	T8A	1	24T8A x 9'-11"	ST 208A
	T8B	1	24T8B x 19'-11"	ST 208B
	T15A	1	24T15A x 19'-11"	ST 215A
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	1	3" x 2" x 1/4" x 5'-11"	ST 403
	A4	1	3" x 2" x [illegible] x 13'-3"	ST 403
	A8	1	3" x 2" x [illegible] x 6'-8"	ST 405
	A31	3	3" x 2" x 1/4" x 5'-8"	ST 410
CLOSURE PLATES	PF-11	3	3" x [illegible] x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	[illegible] x 3/4" x 6'-6"	ST 402
PATCH PLATES	P1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-4 1/2"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1'-4" D x 6'-6 1/2"	ST 215A
ANGLE CLIPS	C1	20	2" x 1 1/2" x .25" x 8"	ST 400
	C2	4	2 1/2" x 1 1/2" x .25" x 8"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
	CB2	6	7/8" ø x 1'-3"	ST 400
	CB3	6	15/16" ø x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/4" x 6 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-8"	ST 400
	P6	1	4 1/2" x .38" x 0'-9"	ST 401
	P8	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (BK)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 62 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



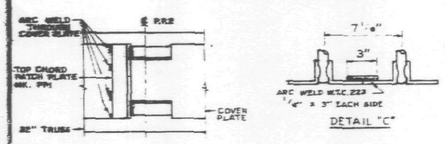


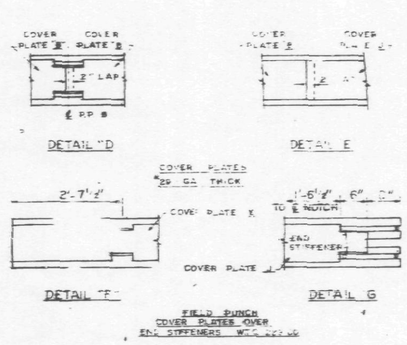


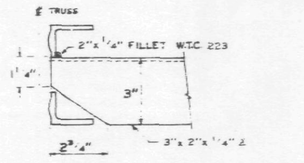
NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	GBC

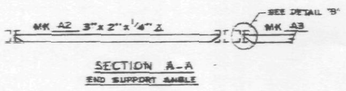
REF. DRWG.

7-A83-33	10-4-68
7-A83-24	8-15-68
7-A81-14, 17, 18 & 19	10-4-68
7-A82-3	7-22-68
7-A82-14	10-4-68
SA-124	10-11-68









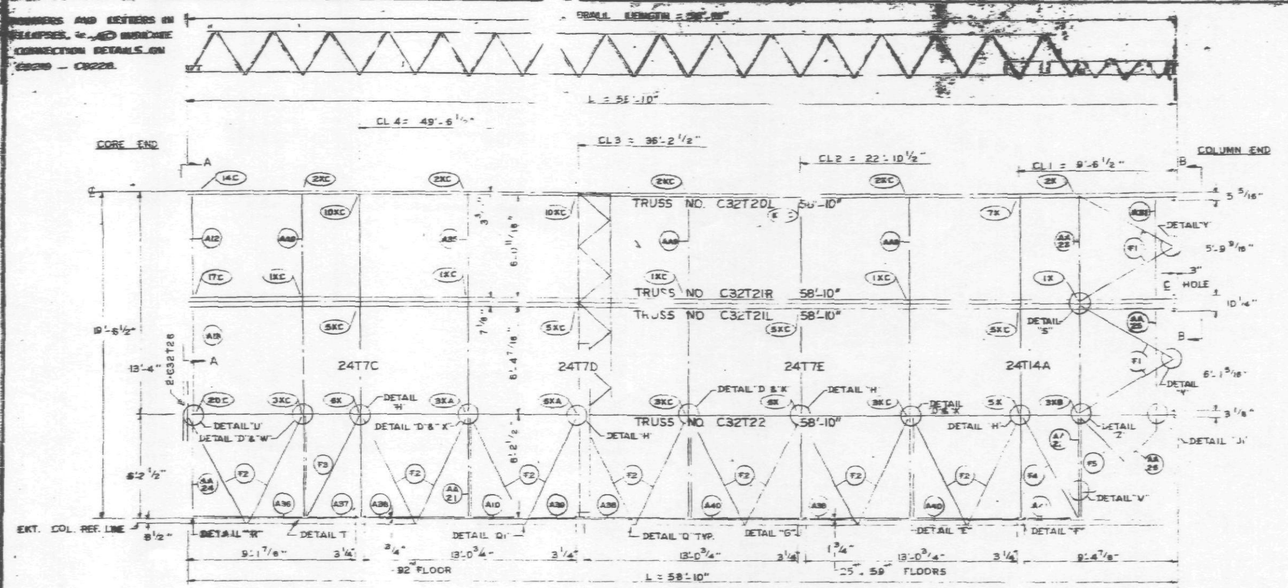
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

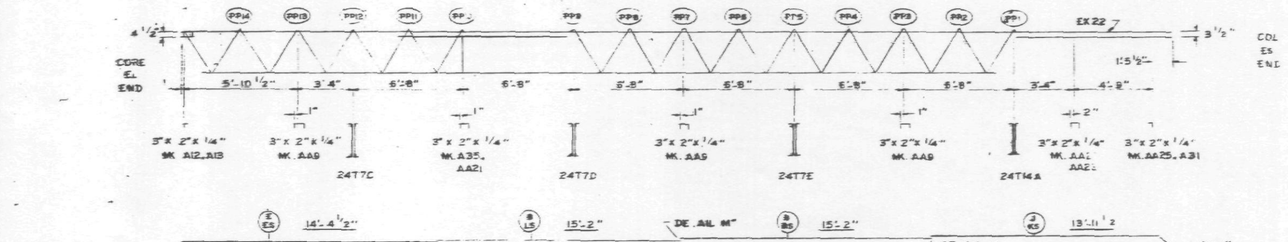
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL ER2A - 20' x 59'-9"

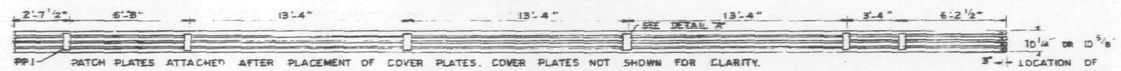
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-33	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 2/28/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY [illegible]	DATE	CHECKED BY T.M. CHIURA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible] LACLEDE STEEL CO.		FABRICATION CONT. NO WT C 221	SHEET NO FP ER2A

NUMBERS AND LETTERS IN ELLIPSES, ie. (A2) INDICATE CONNECTION DETAILS ON C32219 – C32228.



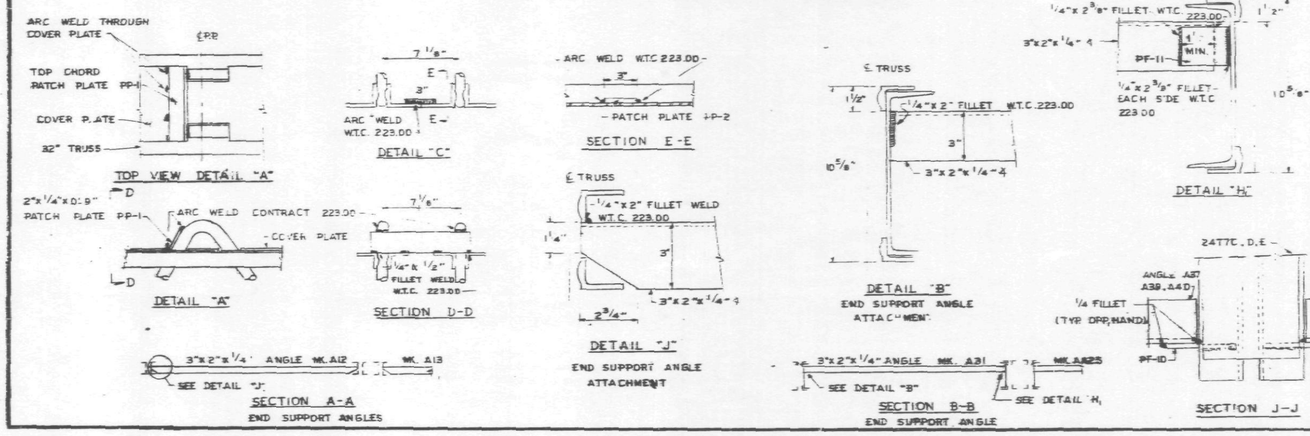


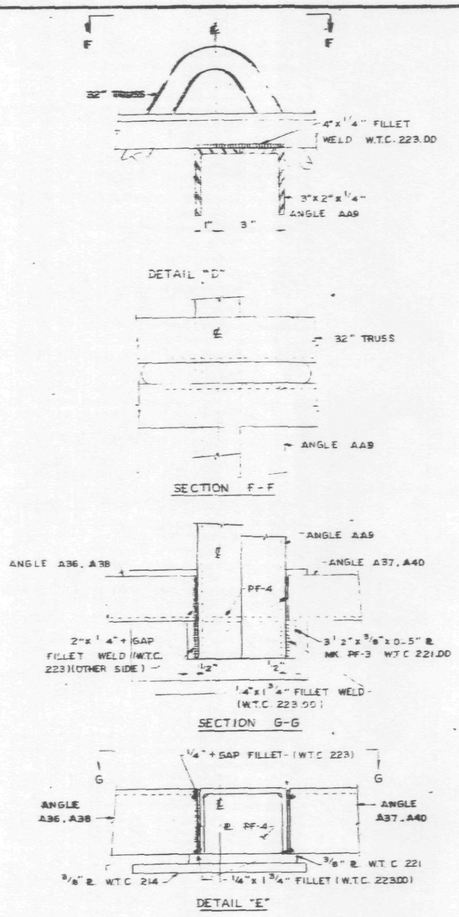
COVER PLATE PLACEMENT

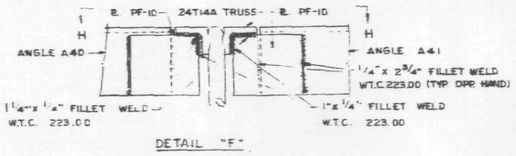


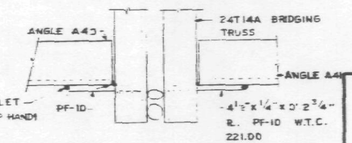
LOCATION OF PATCH PLATES ON TOP CHORD

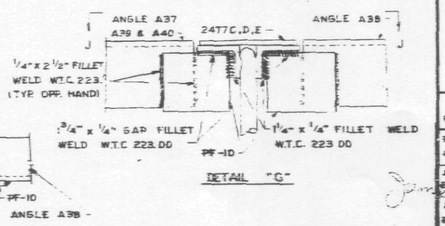
LOCATION OF PATCH PLATES ON BOTTOM CHORD











REQUIRED MATERIAL PER PANEL				SEE DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	C32L	1	C32T20L-58'-10"	ST2201
	C32L	1	C32T21L-58'-10"	ST2208
	C32R	1	C32T21R-58'-10"	ST2208
	C22	1	C32T22-58'-10"	ST--
BRIDGING TRUSSES	T7C	1	24T7C - 19'-6"	BT207C
	T7D	1	24T7D - 19'-6"	BT207D
	T7E	1	24T7E - 19'-6"	BT207E
	T14A	1	24T14A - 19'-6"	BT214A
3"x 2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x2'-7 15/16"	ST404
	A 2	1	3"x2"x1/4"x5'-11	ST404
	A13	1	3"x2"x 1/4"x 5'-11 15/16"	ST404
	A35	1	3"x2"x 1/4"x 5'-8 1/8"	ST440
	A36	1	3"x2"x 1/4"x5'-11 1/2"	ST440
	A37	1	3"x2"x1/4"x 2'-10"	ST440
	A38	3	3"x2"x1/4"x 6'-4"	ST440
	A39	1	3"x2"x 1/4"x 2'-9"	ST440
	A40	2	3"x2"x1/4"x 6'-2"	ST440
	A41	1	3"x2"x1/4"x 2'-10 3/16"	ST440
	A35	1	3"x2"x1/4"x 13'-3"	ST440
ANGLE ASSEMBLY	AA21	1	SEE REF. DRWG.	ST411
	AA22	1	SEE REF. DRWG.	ST411
	AA23	1	SEE REF. DRWG.	ST411
	AA24	1	SEE REF. DRWG.	ST412
	AA25	1	SEE REF. DRWG.	ST412
	AA26	1	SEE REF. DRWG.	ST412
	AA9	3	SEE REF. DRWG.	ST404
PATCH PLATES	PP1	6	2"x1/4"x 0'-9"	ST400
	PP2	6	3"x 5/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x 0.135"x 13'-11 1/2"	ST303
	As	1	3 1/2"x 0.135"x 13'-11 1/2"	ST304
	B	2	9"x 0.135"x 15'-2"	ST303
	Bs	1	3 1/2"x 0.135" x 15'-2"	ST303
	Ls	1	3 1/2"x 0.135"x 15'-2"	ST304
	E	1	9" x 0.135"x 14'- 4 1/2"	ST3903
	Es	1	3 1/2"x 0.135"x 14'- 4 1/2"	ST3903
ANGLE CLIPS	C2	16	2 1/2"x 1 1/4"x 3/16"x0'-8"	ST4901
DIAGONAL FLATS	F1	4	1 1/2"x 3/8"x 6'-8"	ST402
	F2	7	1 1/2"x 5/8"x 6'-10 1/2"	ST402
	F2K	7	1 1/2"x 5/8"x 6'-10 1/2"	ST402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 3'-0"	ST402
	F5	1	1 1/2"x 5/8"x 4'-4"	ST402
MISC. PLATES	PF-1	2	1 1/2"x 1/2"x 0'-4"	ST4DD
	PF-3	5	3 1/2"x 3/8"x 0'-5"	ST4DD
	PF-7	1	5"x 3/8" x 0'-6"	ST401
	PF-8	5	3 1/2"x 3/4"x 0'-2 7/8"	ST401
	PF-10	8	4 1/2"x 1/4"x 0'-2 3/4"	ST401
	PF-11	1	3"x 3/4"x 0'-2 3/8"	ST402
EXTENDED END	EX	1	SEE REF DRWG	ST222
	22			

NO.	DATE	REVISION	BY
1	2-5-89	GENERAL	WSMC

SEE SHEET FP-F2-2 FOR NOTES, REF. DRWG & ADDITIONAL DETAILS

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER – N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

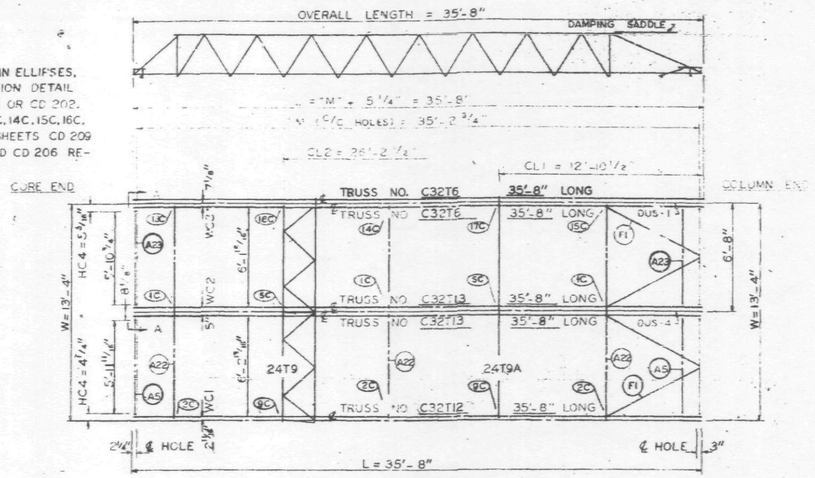
BLDG A FLOORS 25, 59 & 92 (NORTH & SOUTH)

PANEL F2 19'-6" x 58'-10"

FABRICATION BY LACLEDE STEEL COMPANY

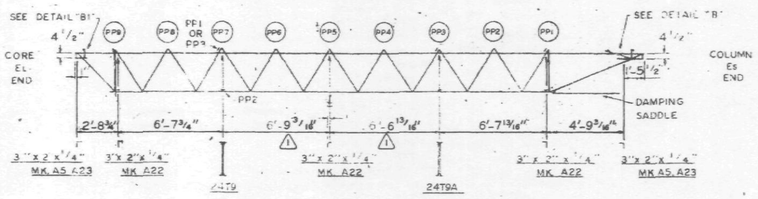
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-34	PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.&N.J.	DATE [illegible]	DRAWN BY: [illegible] DATE: DEC. 3, 1968	
APPROVED FOR FABRICATION BY: [illegible] FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE DEC. 4, 1968	IN CHARGE OF PROD. DEN.
DETAILED LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F2

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.



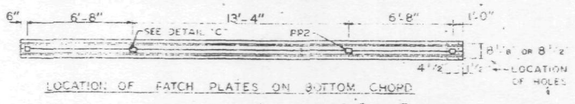
PANEL GR1 SIZE - 13'-4" x 35'-8"

℄ & DIMENSION HC4" ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

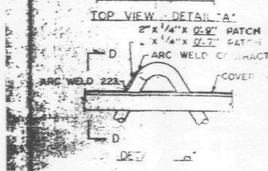


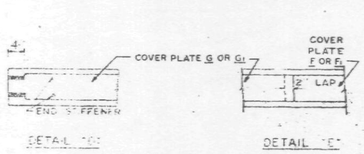
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

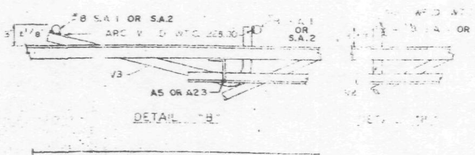
LOCATION OF PATCH PLATES ON TOP CHORD

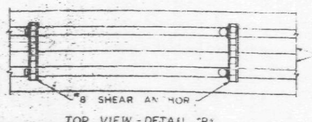


LOCATION OF PATCH PLATES ON BOTTOM CHORD

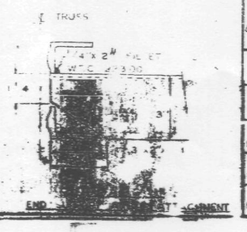




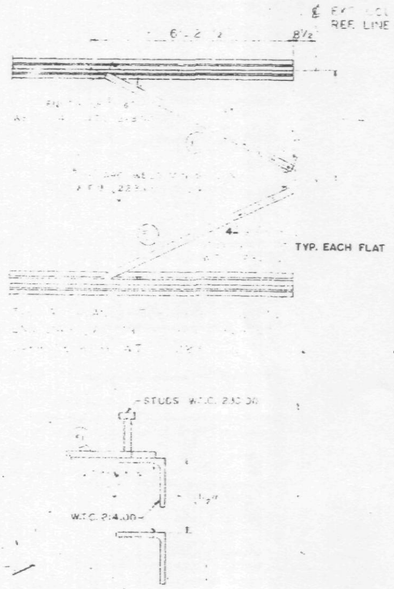




COVER PLATES "29 GA. THICK



COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.



REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
	T9	1	24T9 - 13'-2 3/4"	ST 209
	T9A	1	24T9A - 13'-2 3/4"	ST 209A
ANGLES	A5	2	3"x2"x 1/4"x6'-1 13/16"	ST 403
	A22	9	3"x2"x 1/4"x13'-3 1/16"	ST 405
	A23	2	3"x2"x 1/4"x 6'-0 7/8"	ST 405
PLATES	F	4	1/2"x 8"x 6'-8"	ST 402
PATCH PLATES	PP1	4	2"x 1/4" x 0'-9"	ST 400
	PP2	8	3"x 1/8" x 0'-3"	ST 400
	PP3	4	2"x 1/4" x 0'-7"	ST 400
COVER PLATES	G1	1	7"x.0135"x17'-10 1/2"	ST 303
	F1	1	7"x.0135"x17'-3 1/2"	ST 303
	G	1	9"x.0135"x 17'-10 1/2"	ST 303
	F	1	9"x.0135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C1	← Up to F133 Tower A		
	C1	8*	2"x 1 1/2" x 1/4" x 6"	ST 400 ← F134 up
#8 SHEAR ANCHOR	SA1	3	#8 REBAR x 0'-7"	ST 400
	SA2	3	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS 4	1	3 1/2" x 3" x 3/8" x 3'-6 3/8"	ST 298
	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/8"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

* CHANGE BECOMES EFFECTIVE AFTER 33rd FLOOR, TOWER A.

NO.	DATE	REVISION	BY
2	4-18-69	AS NOTED	G.D.C.
1	2-21-69	AS NOTED	G.D.C.

SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
REJECTED
Date 5/69 By SK

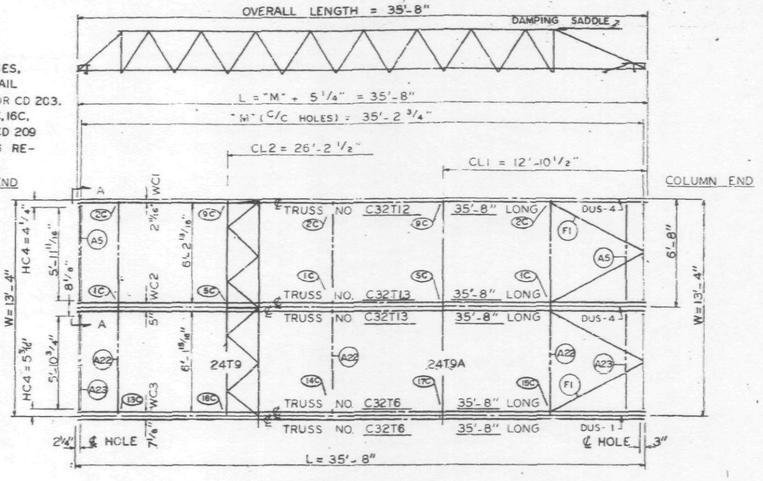
REF. DRWG.		
7	A84-31 & 31	1-3-68
7	A84-5 & 16	5-8-68
7	A84-39-41	1-3-68
SA	124	10-20-67
7	A8342	1-3-68
7	A81-11 & 12	5-10-68
7	A84-4	4-1-68
7	A84-42	4-1-68

COVER PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & -108 (EAST & W'LY ST) 79-83 (W) 46-49 (E) PANEL GR1 - 13'-4" x 35'-8"
BLDG. B FLOORS 14-24, 26-48, 50-58, 60-74, 84-91 & 93-108 (N & S) 79-83 (W) 46-49 (E)

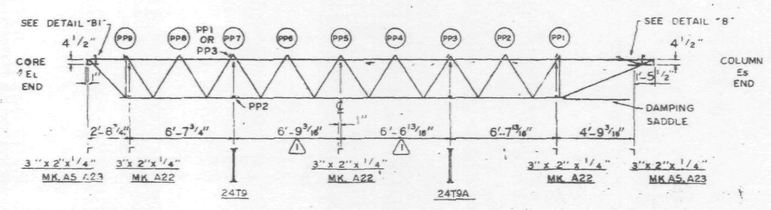
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY _____ FOR P.O.N.Y.A. DATE
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DESIGN DRAWING 7-A83-16
DRAWN DATE
CHECKED DATE
FABRICATOR W.T.C. 221

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD202 OR CD 203. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.



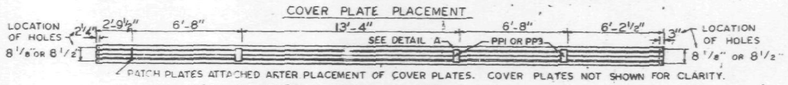
PANEL G1 SIZE 13'-4" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



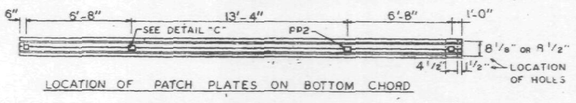
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

COVER PLATE PLACEMENT

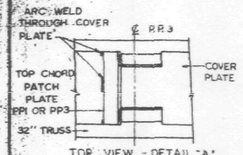


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

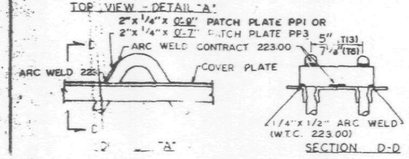
LOCATION OF PATCH PLATES ON TOP CHORD



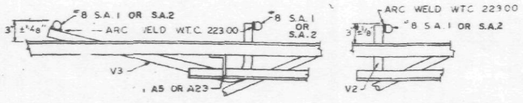
LOCATION OF PATCH PLATES ON BOTTOM CHORD

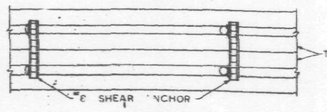


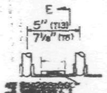
TOP VIEW - DETAIL "A"

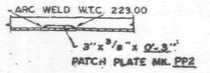


COVER PLATES 29 GA. THICK



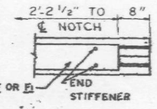


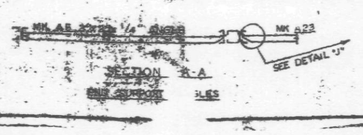




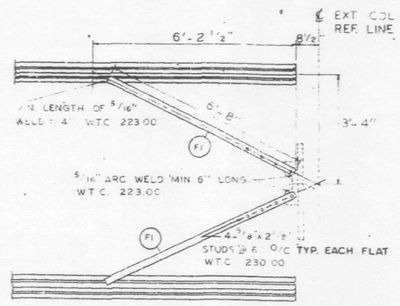
TO BE MADE WITH LOW HYDROGEN RODS IN THE VERTICAL POSITION. ALL CONNECTION ARC WELDS SHALL BE FULL THROAT. A = 1/4" B = 1/4"

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

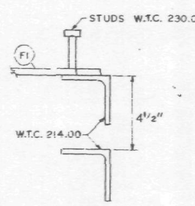




COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 208
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
BRIDGING TRUSSES	T9	1	24T9 - 13'-2 3/4"	BT 209
	T9A	1	24T9A - 13'-2 3/4"	BT 209A
3" x 2" x 1/4" ANGLE	A5	2	3"x2"x1/4"x6'-1 13/16"	ST 403
	A22	3	3"x2"x1/4"x13'-3 1/2"	ST 405
	A23	2	3"x2"x1/4"x 6'-0 7/8"	ST 405
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST 402
PATCH PLATES	PP1	4	2" x 1/4" x 0'-9"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 400
	PP3	4	2" x 1/4" x 0'-7"	ST 400
COVER PLATES	G1	1	7"x.0135"x 17'-10 1/2"	ST 303
	F1	1	7"x.0135"x 17'-3 1/2"	ST 303
	G	1	9"x.0135"x 17'-10 1/2"	ST 303
	F	1	9"x .0135"x 17'-3 1/2"	ST 303
ANGLE CLIPS (2)				ST 400
	C1	8*	2"x 1 1/2"x 1/4" x 6"	ST 400
"8 SHEAR ANCHOR	SA1	3	"8 REBAR x 0'-7"	ST 400
	SA2	3	"8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-4	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST 298
	DUS-1	1	3 1/2"x 3 1/2"x 3/16"x 3'-2 3/4"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

(2) *CHANGE BECOMES EFFECTIVE AFTER FLOOR 33, TOWER A.

Fl. 33 add
F1 334

NO.	DATE	REVISION	BY
(2)	4-18-69	AS NOTED	G.D.C.
(1)	2-21-69	AS NOTED	G.D.C.

REF. DRWG.

AB4-3 & 3.1	1-3-68
7-AB4-15 & 16	5-6-68
7-AB4-39-41	1-3-68
SA-124	10-20-67
7-AB3-2	1-3-68
7-AB1-11 & 12	5-10-68
7-AB2-6	2-15-68
7-AB4-42	4-1-68

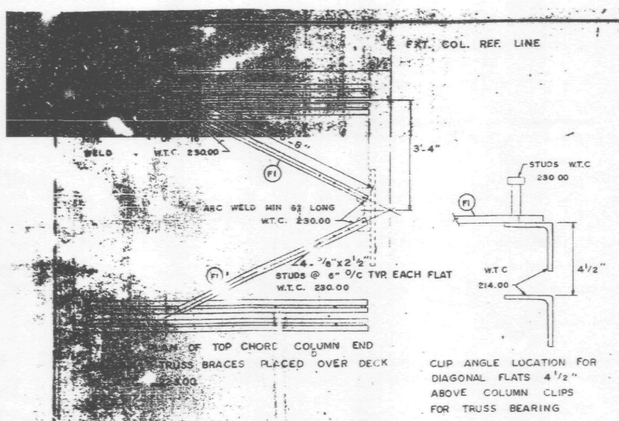
SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
REJECTED
Date 3/15/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 &
3-106 (E & W) 45-49 (W) 80-83 (E) PANEL G1 - 13'-4" x 35'-8"
(2) BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-106 (N & S) 80-83 (N) 45-49 (S)

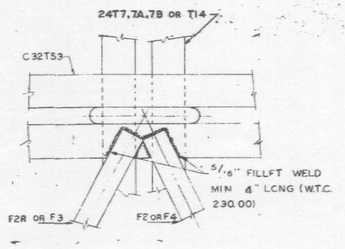
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-15 5-10-68	PLATE NO.
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY B.S. DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY LACLEDE STEEL CO.	DATE	CHECKED BY I.M.CHUNG DATE APRIL 10, 1968	
DETAILED BY B.S. DABIR		FABRICATION CONT. NO. W.T.C. 221	SHT. NO. 1 OF 1

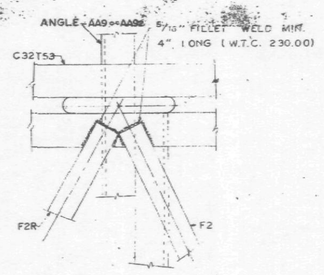


PLAN OF TOP CHORD COLUMN END TRUSS BRACES PLACED OVER DECK W.T.C. 230.00

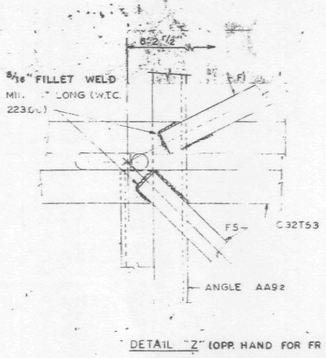
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING



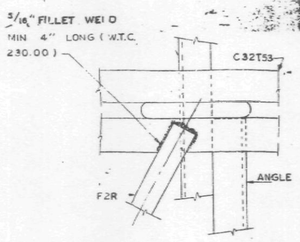
DETAIL "H" (OPP. HAND FOR FR PANEL)



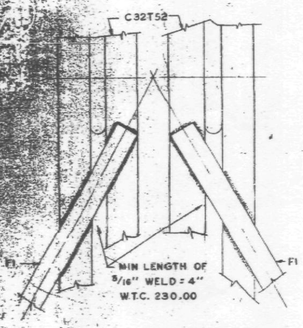
DETAIL "X" (OPP. HAND FOR FR PANEL)



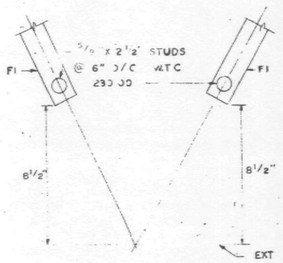
DETAIL "Z" (OPP. HAND FOR FR PANEL)



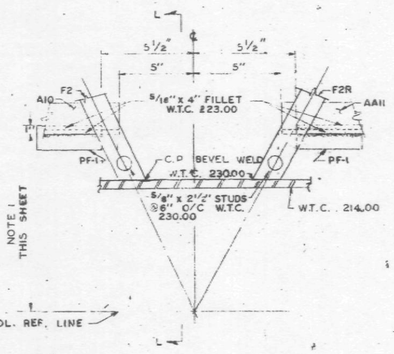
DETAIL "W" (OPP. HAND FOR FR PANEL)



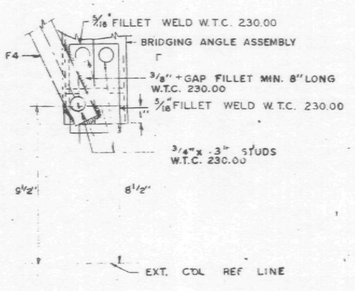
DETAIL "S"



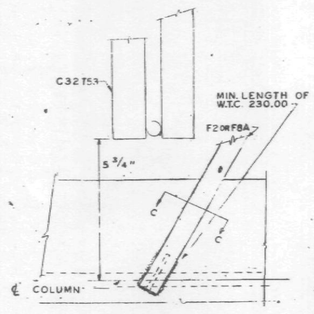
DETAIL "T"



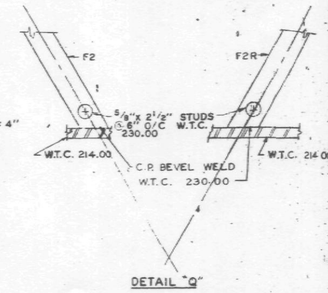
DETAIL "U"



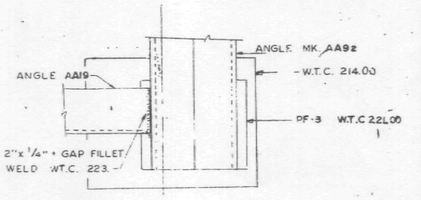
DETAIL "T"



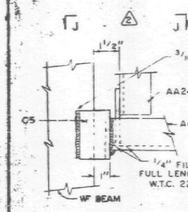
DETAIL "U"



DETAIL "Q"

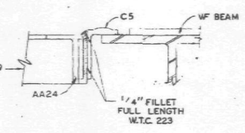


SECTION H-H (OPP. HAND FOR FR PANEL)



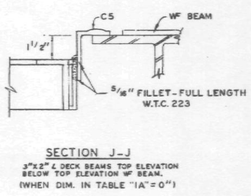
DETAIL "R" (OPP HAND FOR FR5)

WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.



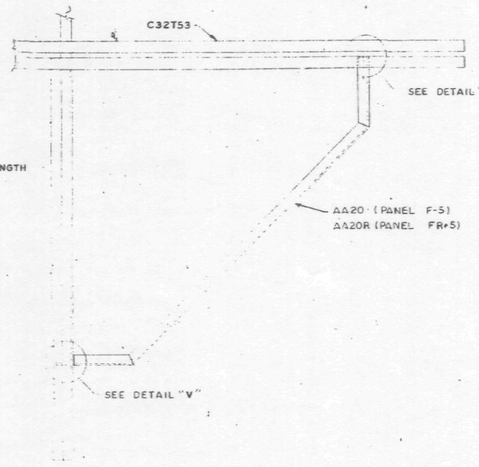
SECTION J-J

3"x 3" ℄ DECK BEAMS TOP ELEVATION SAME AS TOP ELEVATION WF BEAM. (WHEN DIM. IN TABLE "1A" = 1 1/2")

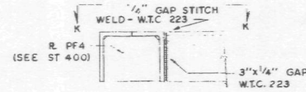


SECTION J-J

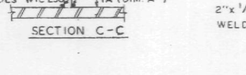
2"x 2" ℄ DECK BEAMS TOP ELEVATION BELOW TOP ELEVATION WF BEAM. (WHEN DIM. IN TABLE "1A" = 0")



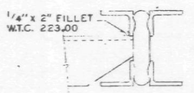
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F5) AND AA20R (FR5 - OPP HAND)



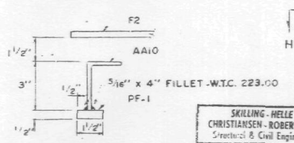
DETAIL "V"



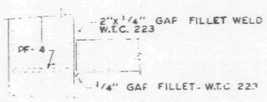
SECTION C-C



DETAIL "J"



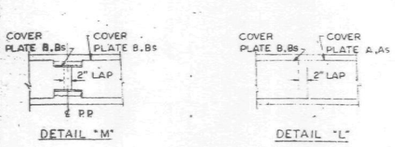
SECTION L-L



SECTION K-K

TABLE "1A"				
	DIM "A" @ COL. LINE			
FL	417	443	217	243
45	1 1/2	-	0	0
46	1 1/2	—	—	1 1/2
47	1 1/2	—	—	1 1/2
48	1 1/2	—	—	1 1/2
49	0	—	—	0
79	1 1/2	1 1/2	0	0
80	—	1 1/2	1 1/2	—
81	—	1 1/2	1 1/2	—
82	—	1 1/2	1 1/2	—
83	—	0	0	—

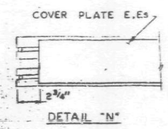
PANEL F5 — F2 USED WHEN DIM "A" = 0"
F8A " " = 1 1/2"
△1 PANEL FR5 — F2R = 0"
F8AR = 1 1/2"



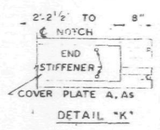
DETAIL "M"

DETAIL "L"

COVER PLATES 29 GA. THICK



DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

NOTE

△2 1. DIMENSION IS 10 1/4" FOR FLOORS 45-49 (SOUTH) 45 (NORTH). AND IS 9 1/4" FOR 79-83 (NORTH).

NO.	DATE	REVISION	BY
△2	4-24-69	AS NOTED	G.D.C.
△1	4-9-69	AS NOTED	G.D.C.

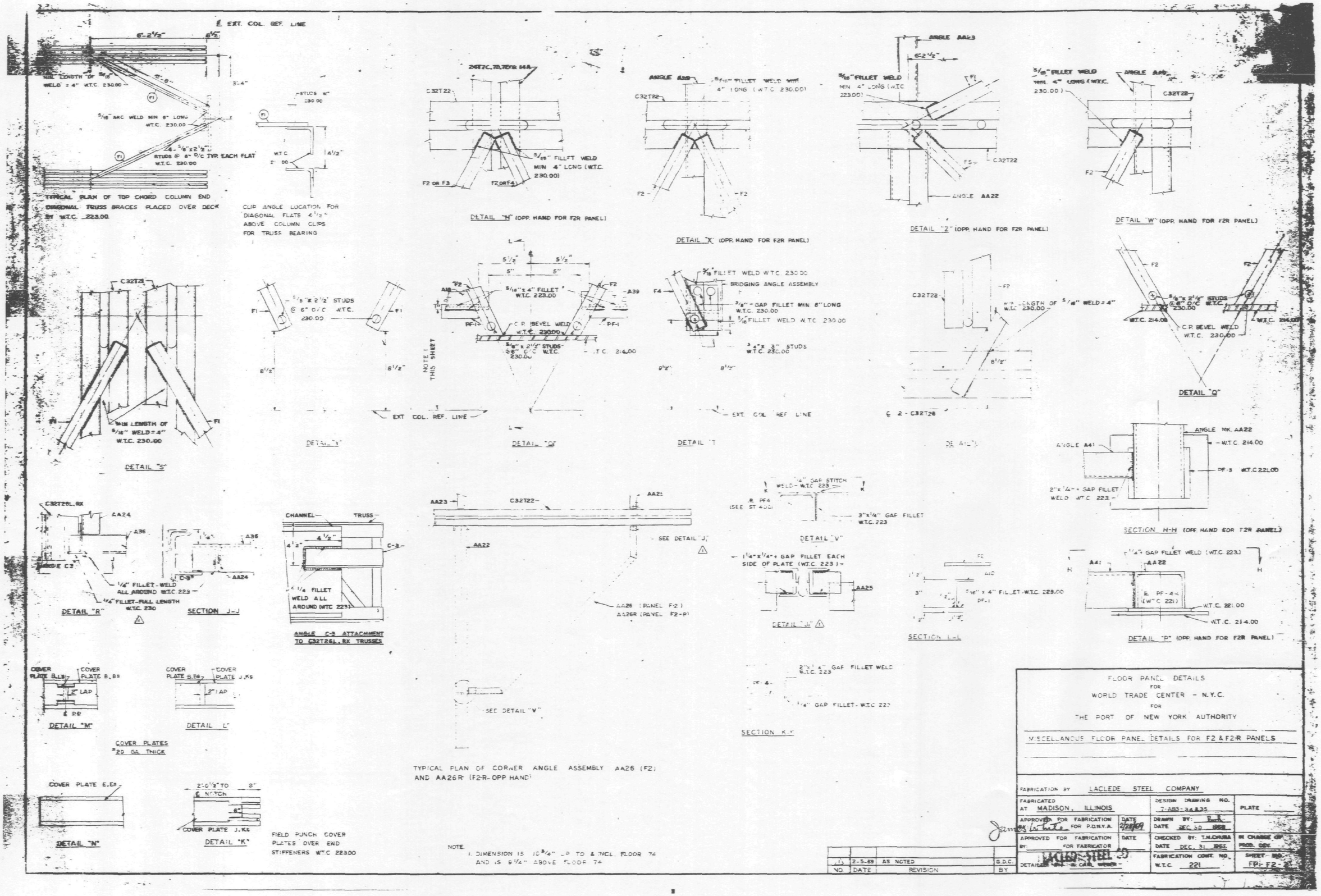
SKILLING - HELLE CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
5/15/69 SIC

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F5 & FR5 PANELS

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-75 & 76
PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE
DRAWN BY: D.W.R. DATE JAN. 20, 1969
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.H.CHURA DATE JAN. 20, 1969
IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP - F5 - 2



FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

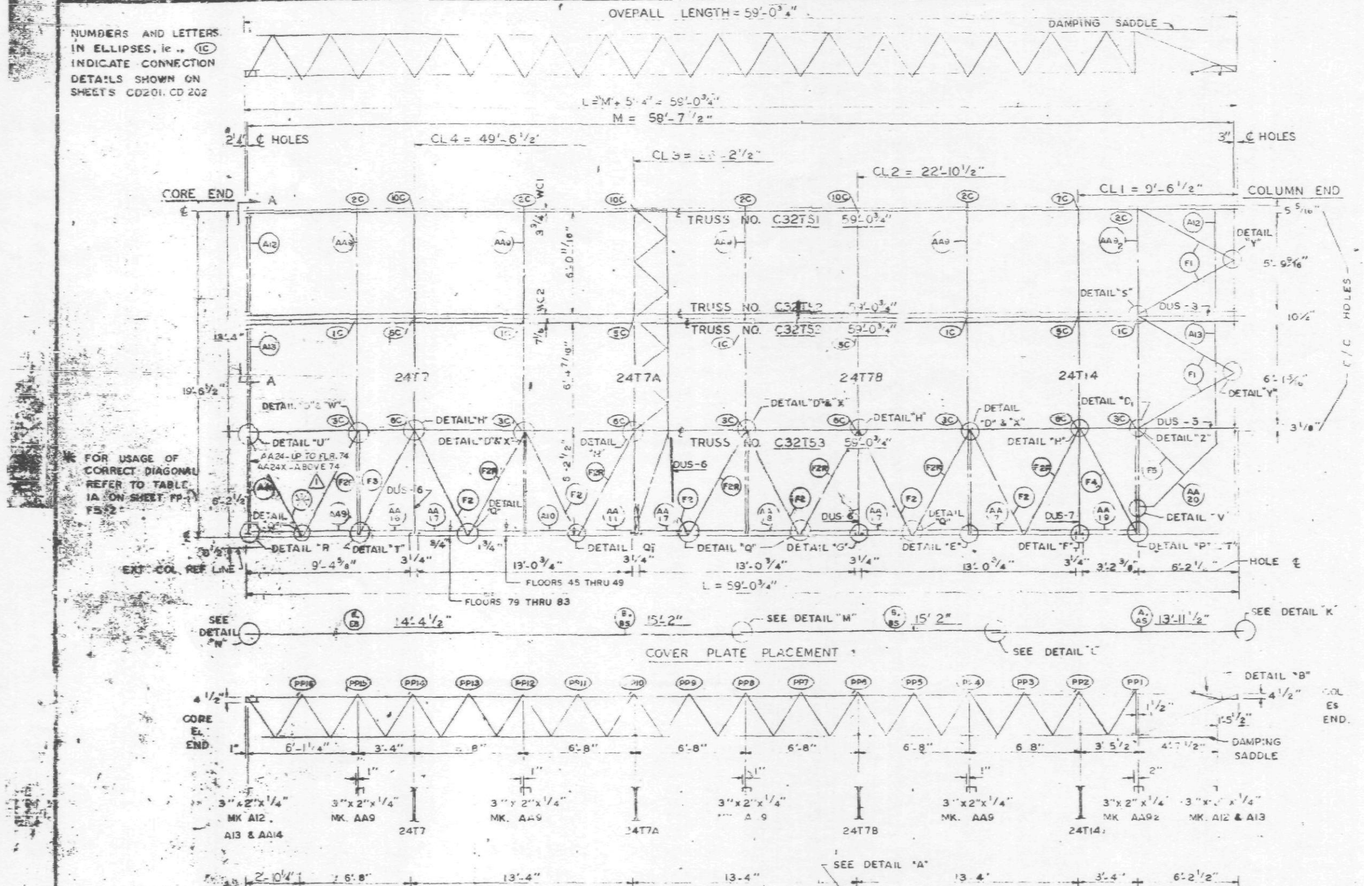
MISCELLANEOUS FLOOR PANEL DETAILS FOR F2 & F2-R PANELS

FABRICATION BY LACLEDE STEEL COMPANY

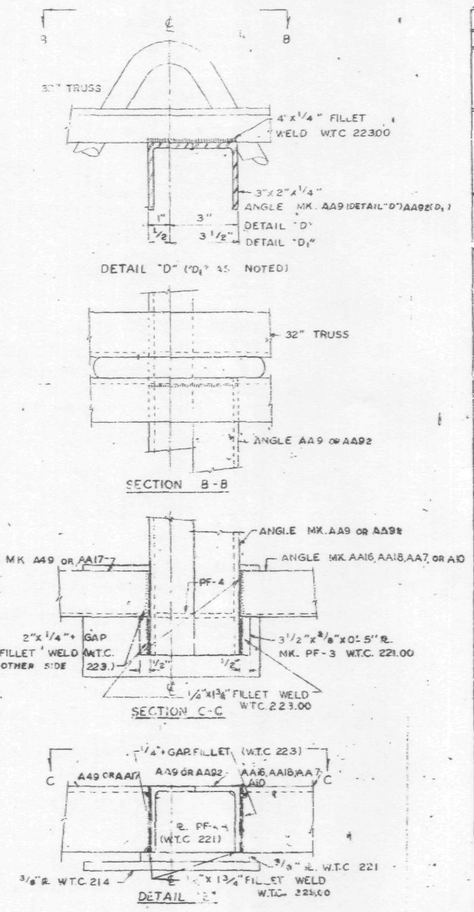
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-34 & 35	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 4/22/69	DRAWN BY: P.M.S. DATE DEC. 30 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE DEC. 31 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: LACLEDE STEEL CO. ST. LOUIS, MISSOURI		FABRICATION CONTR. NO. W.T.C. 221	SHEET NO. FP1-F2-21

NO.	DATE	REVISION	BY
1	2-5-69	AS NOTED	G.D.C.

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 202



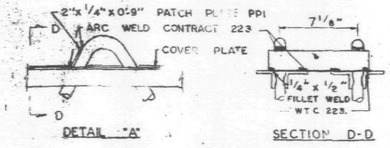
FOR USAGE OF CORRECT DIAGONAL REFER TO TABLE 1A ON SHEET FP-FS-2

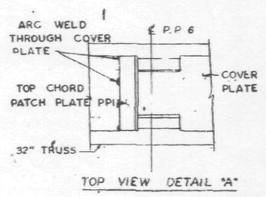


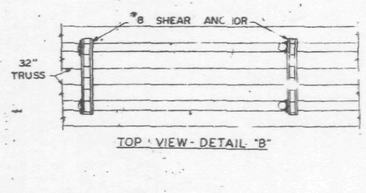
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T51	1	C32T51 - 59'-0 3/4"	ST 251
	T52	2	C32T52 - 59'-0 3/4"	ST 252
	T53	1	C32T53 - 59'-0 3/4"	ST 253
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	BT 207
	T7A	1	24T7A - 19'-6"	BT 207A
	T7B	1	24T7B - 19'-6"	BT 207B
	T14	1	24T14 - 19'-6"	BT 214
3" x 2" x 1/4" ANGLES	A10	1	3" x 2" x 1'-4" x 2'-7 15/16"	ST 404
	A12	2	3" x 2" x 1'-4" x 5'-11 15/16"	ST 404
	A13	2	3" x 2" x 1'-4" x 6'-3 7/16"	ST 404
	A49	1	3" x 2" x 1'-4" x 6'-0 7/16"	ST 413
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST 404
	AA9	4	SEE REF. DRWG.	ST 404
	AA92	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG.	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA19	1	SEE REF. DRWG.	ST 404
	**AA24	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
	F2 & F2R	6 ✱ 1	1 1/2" x 5/8" x 6'-10 1/2"	ST 402
	F3	1	1 1/2" x 5/8" x 6'-11 1/4"	ST 402
	F4	1	1 1/2" x 5/8" x 7'-0	ST 402
	F5	1	1 1/2" x 5/8" x 14'-4 1/2"	ST 402
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST 400
	PP2	6	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	1	9" x 0.135" x 13'-11 1/2"	ST 303
	B	2	9" x 0.135" x 15'-2"	ST 303
	E	1	9" x 0.135" x 14'-4 1/2"	ST 303
	As	1	3 1/2" x 0.135" x 13'-11 1/2"	ST 303
	Bs	2	3 1/2" x 0.135" x 15'-2"	ST 303
	Es	1	3 1/2" x 0.135" - 14'-4 1/2"	ST 303
DIAGONAL FLAT	F8A	✱	SEE REF. DRWG.	ST 415
# 8 SHEAR ANCHOR	SA2	2	# 8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST 299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST 299
MISC PLATES	PF-1	2	1 1/2" x 1 1/2" x 0'-4"	ST 400
	PF-3	5	3 1/2" x 3/8" x 0'-3"	ST 400
CONN ANGLE	C5	1	3" x 2" x 3'-7" x 0'-3"	ST 413
ANGLE CLIP ⚠	C1	12	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST 400
CORNER ANGLE ASSEMBLY	AA20	1	SEE PREF. DRWG	ST 405

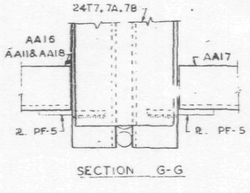
NO	DATE	REVISION	BY
⚠	4-9-69	AS NOTED	G.D.C.

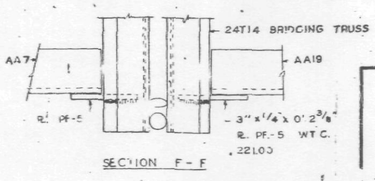
REF. DRWG.		SA-124	1-6-69
7-AB1-48	11-25-68	7-AB4-14, 14.1	10-15-68
7-AB1-47	11-25-68	7-AB4-15, 16	7-22-68
7-AB1-48	11-25-68	7-AB4-21	7-22-68
7-AB2-2	7-22-68	7-AB4-23, 25	7-22-68
7-AB2-9	7-22-68	7-AB4-29	1-3-69
7-AB3-70	11-25-68	7-AB4-39-41, 43	7-22-68
7-AB3-75	11-25-68	7-AB4-42	10-15-68
7-AB4-3	10-15-68	7-AB4-45	12-20-68

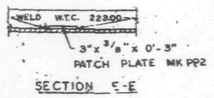


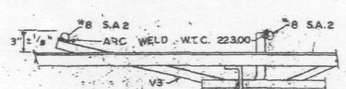


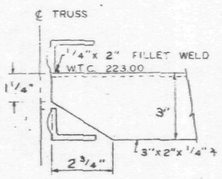


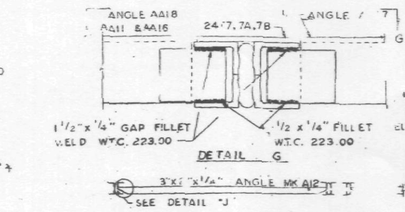












NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS
SEE SHEET FP-FS-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

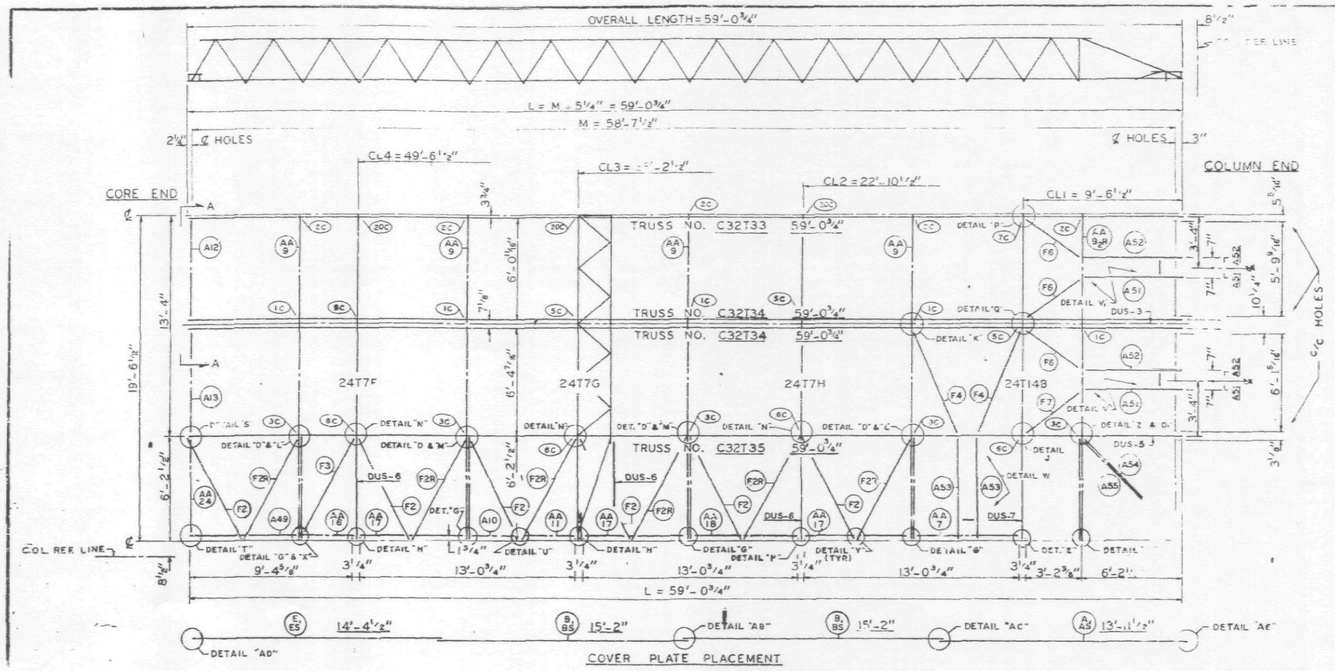
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

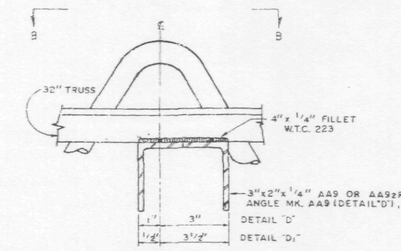
BLDG. A FLOORS 45 (NORTH & SOUTH) 46-49 (SOUTH) 79-83 (NORTH)

PANEL F5 19'-6 x 59'-0 3/4"

FABRICATION BY: LACLEDE STEEL COMPANY

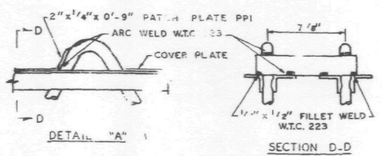
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-75	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 4/16/69	DRAWN BY: G.A. DATE JAN. 17, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATION DATE	CHECKED BY: T.R. GHURA DATE JAN. 17, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. GIRL WEBER LACLEDE STEEL CO.	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F5

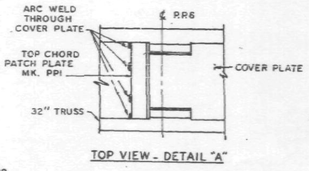


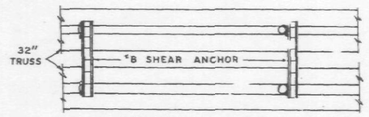


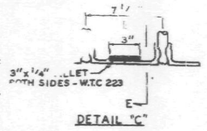
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T33	1	C32T33 x 59'-0 3/4"	ST 233
	T34	2	C32T34 x 59'-0 3/4"	ST 234
	T35	1	C32T33 x 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F x 19'-6"	BT 207F
	T7G	1	24T7G x 19'-6"	BT 207G
	T7H	1	24T7H x 19'-6"	BT 207H
	T14B	1	24T14B x 19'-6"	BT 214B
3"x2"x 1/4" ANGLES	A10	1	3"x 2"x 1/4"x 2'-7 15/16"	ST 404
	A12	1 -	3"x 2"x 1/4"x 5'-11 1/16"	ST 404
	A13	1	3"x 2"x 1/4"x 6'-3 7/16"	ST 404
	A49	1	3"x 2"x 1/4"x 8'-0 1/16"	ST 413
	A51	2	3"x 2"x 1/4"x 6'-0"	ST 413
	A52	2	3"x 2"x 1/4"x 6'-0"	ST 413
	A53	2	3"x 2"x 1/4"x 5'-10"	ST 413
	A54	1	3"x 2"x 1/4"x 4'-0 1/2"	ST 413
	A55	1	3"x 2"x 1/4"x 4'-3"	ST 413
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG	ST 404
	AA9	4	SEE REF. DRWG.	ST 404
	AA9 2R	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG.	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	6	1 1/2" x 5/8" x 6'-10 1/2"	ST 402
	F2R	6	1 1/2" x 5/8" x 6'-10 1/2"	ST 402
	F3	1	1 1/2" x 5/8" x 8'-11 1/4"	ST 402
	F4	2	1 1/2" x 5/8" x 7'-0"	ST 402
	F6	3	1 1/2" x 5/8" x 4'-7"	ST 415
	F7	1	1 1/2" x 5/8" x 4'-9 3/4"	ST 415
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST 400
	PP2	6	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	1	9" x .0135" x 13'-11 1/2"	ST 303
	B	2	9" x .0135" x 15'-2"	ST 303
	E	1	9" x .0135" x 14'-4 1/2"	ST 303
	As	1	3 1/2" x .0135" x 13'-11 1/2"	ST 303
	Bs	2	3 1/2" x .0135" x 15'-2"	ST 303
	Es	1	3 1/2" x .0135" x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	8	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C2	7	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C5	1	3" x 2" x .37" x 0'-3"	ST 418
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/8"	ST 298
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/8"	ST 299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 3/8"	ST 1299
	DUS-7	1	3 1/2 x 3 1/2" x 3/8" x 4'-4 3/8"	ST 299
MISC. PLATES	PF-1	2	1 1/2" x 1 1/2" x 0'-4"	ST 400
	PF-3	5	3 1/2" x 3/8" x 0'-5"	ST 400
	PF-12	2	8 1/2" x 1 1/2" x 1'-0"	ST 416
	PF-13	2	1" x 1/4" x 1'-0"	ST 416
	PF-14	2	3" x 1/4" x 0'-7"	ST 416
	PF-15	2	1 1/2" x 1 1/2" x 0'-2"	ST 416
	PF-16	2	8 1/4" x 1 1/2" x 0'-2"	ST 416
	PF-17	2	2" x 1/4" x 3 1/2"	ST 416
	PF-18	3	2" x 1/4" x 1'-1 3/8"	ST 416
*8 SHEAR ANCHOR	SA2	2	*8 REBAR x 0'-9"	ST 400

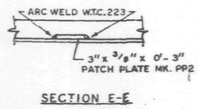
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 204 & CD 229, ie.. (1C)

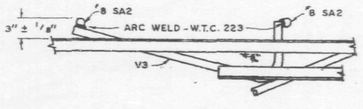


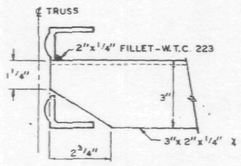


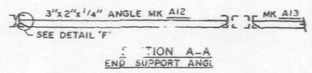












ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-F8-2 OR FP-F8-3 FOR DETAILS CALLED BUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FILLET.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY
1	4-10-69	GENERAL	G.D.C.

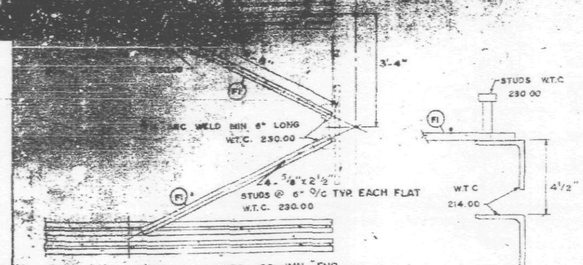
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH)

PANEL F8 19'-6" x 59'-0 3/4"

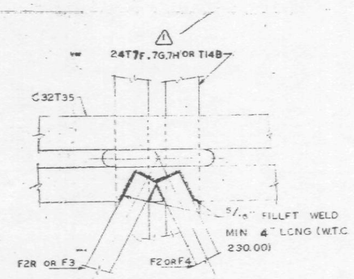
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-62	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY: James White	DATE 4/15/69	DRAWN BY: gdc DATE FEB. 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE FEB. 7, 1989	IN CHARGE OF PROD. DEV.
DETAILED BY: SEE TO WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F8

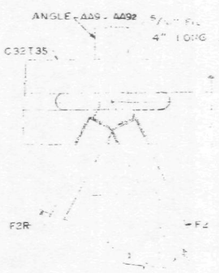


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

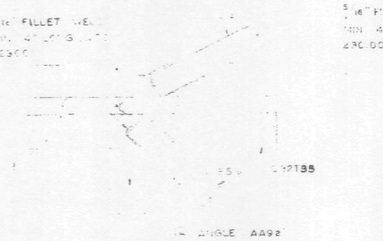
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING



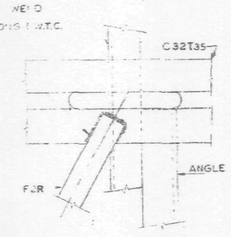
DETAIL "B" (OPP HAND FOR FR PANEL)



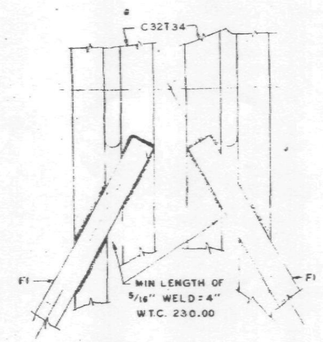
DETAIL "X" (OPP HAND FOR FR PANEL)



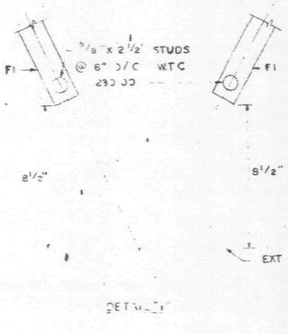
DETAIL "Z" (OPP HAND FOR FR PANEL)



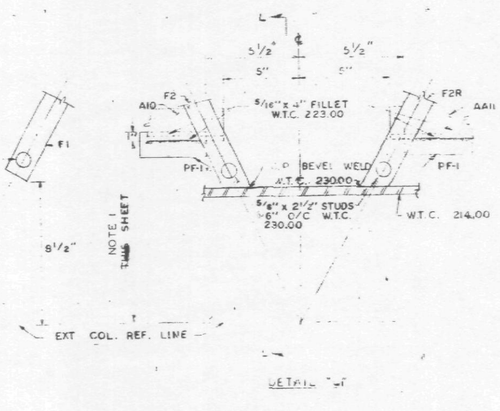
DETAIL "W" (OPP HAND FOR FR PANEL)



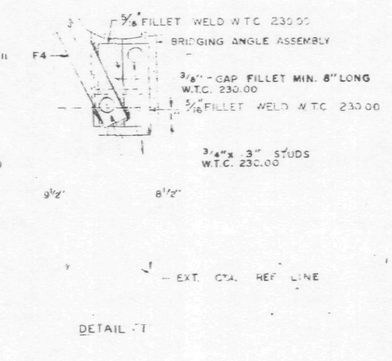
DETAIL "S"



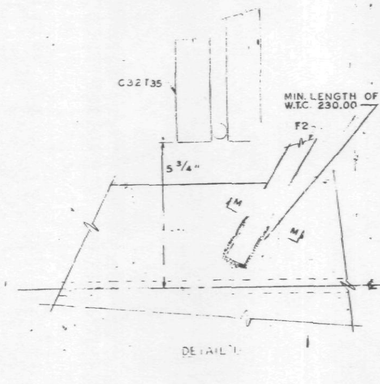
DETAIL "T"



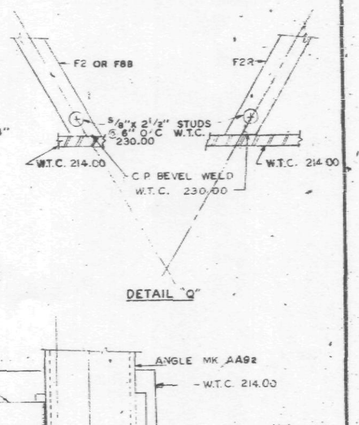
DETAIL "U"



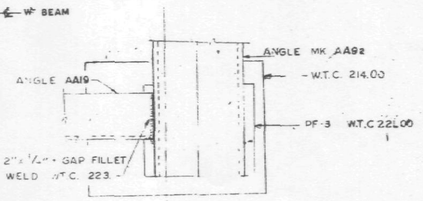
DETAIL "V"



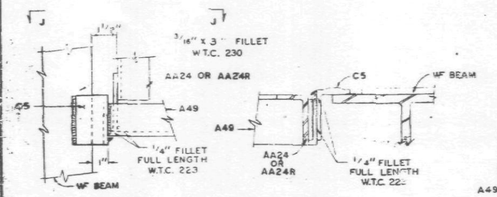
DETAIL "Y"



DETAIL "Q"



SECTION H-H (OPP. HAND FOR FR PANEL)

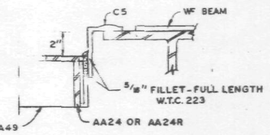


DETAIL "R"

WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.

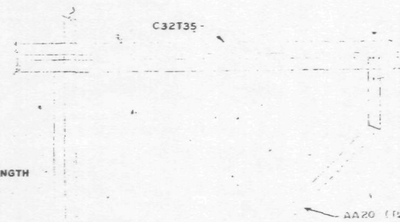
SECTION J-J

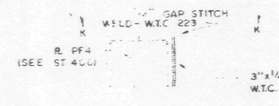
3"x 2" x DECK BEAMS TOP ELEVATION SAME AS TOP ELEVATION OF W BEAM.



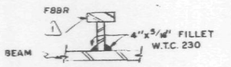
SECTION J-J

3"x 2" x DECK BEAMS TOP ELEVATION BELOW TOP ELEVATION W BEAM.
(PANEL FR3 NORTH - COL. 443 - FLOOR 44 ONLY)



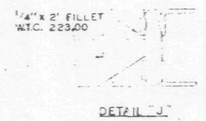


DETAIL "V"

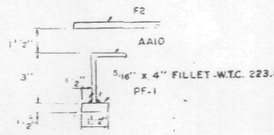


SECTION M-M

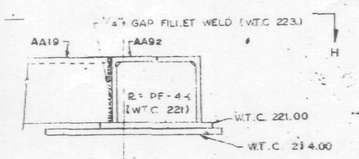
(SECT. M-M APPLIES TO PANEL FR3 - 44" FLOOR - NORTH COL. 443 - ONLY)



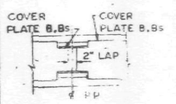
DETAIL "J"



SECTION L-L



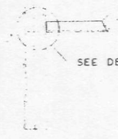
DETAIL "P" (OPP. HAND FOR FR PANEL)



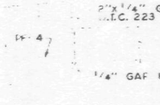
DETAIL "M"

DETAIL "L"

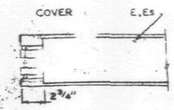
COVER PLATES "29 GA" THICK



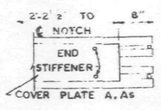
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F3) AND AA20R (FR3-OPP HAND)



SECTION K-K



DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

NOTE

1. DIMENSION IS 10 3/4" FOR FLOORS 44 AND IS 9 1/4" FOR 78

NO.	DATE	REVISION	G.D.C. BY
1	4-9-69	AS NOTED	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F3 & FR3 PANELS

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-A83-75 & 76

PLATE

APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 4/21/69

DRAWN BY: Gmh DATE JAN. 20, 1969

APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE

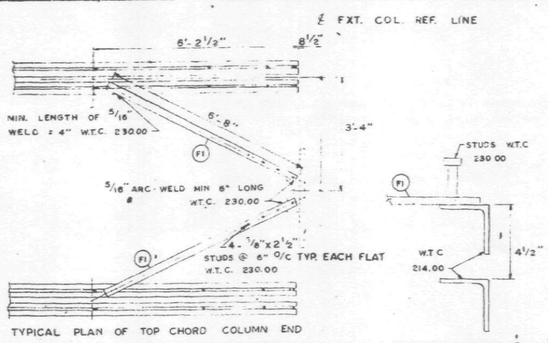
CHECKED BY: T.M.CHURA DATE JAN. 20, 1969

IN CHARGE OF PROD. DEV.

DETAIL LACLEDE STEEL CO.

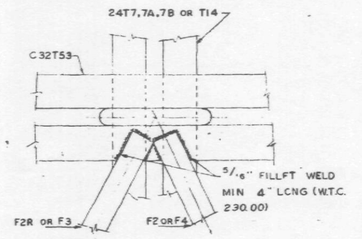
FABRICATION CONT. NO. W.T.C. 221

SHEET NO. FP-F3-2

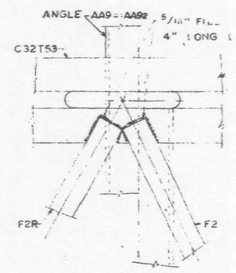


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

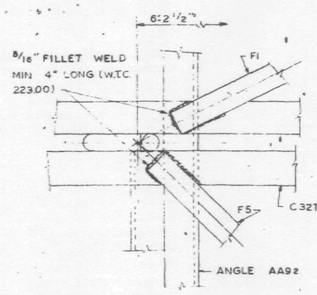
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING



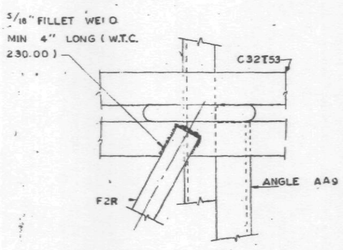
DETAIL "H" (OPP. HAND FOR FR PANEL)



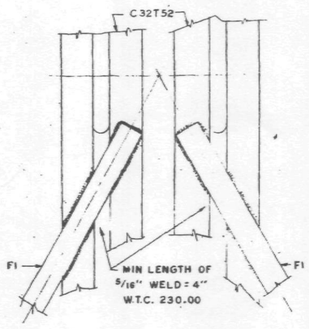
DETAIL "X" (OPP. HAND FOR FR PANEL)



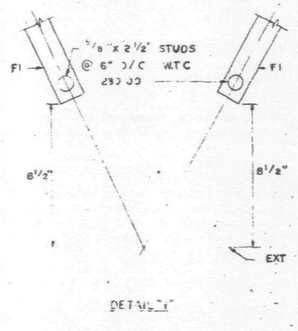
DETAIL "Z" (OPP. HAND FOR FR PANEL)



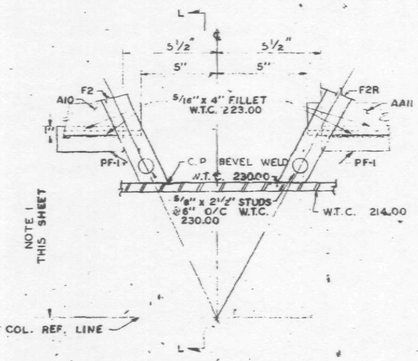
DETAIL "W" (OPP. HAND FOR FR PANEL)



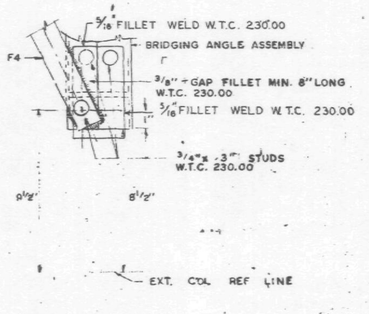
DETAIL "S"



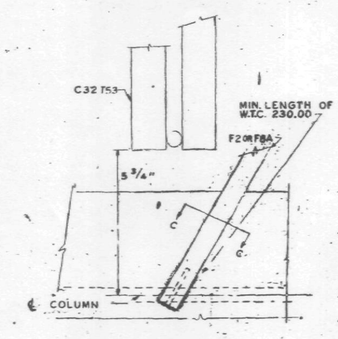
DETAIL "I"



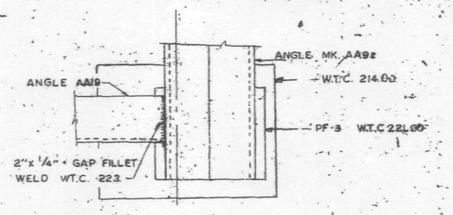
DETAIL "O"



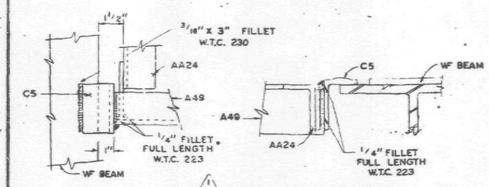
DETAIL "T"



DETAIL "U"



SECTION H-H (OPP. HAND FOR FR PANEL)

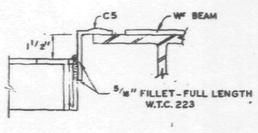


DETAIL "R" (OPP HAND FOR FR5)

WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.

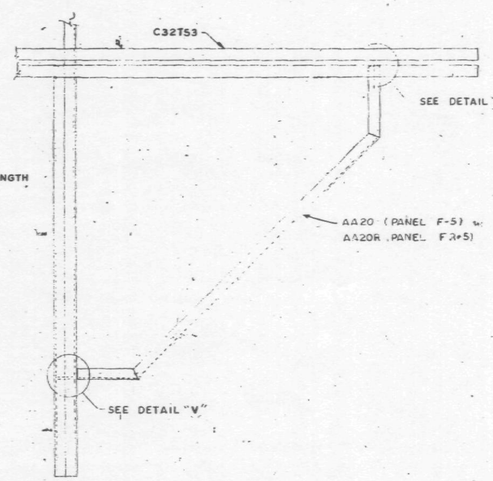
SECTION J-J

3"X 2"L DECK BEAMS TOP ELEVATION SAME AS TOP ELEVATION WF BEAM.

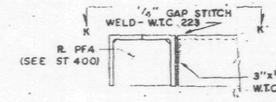


SECTION J-J

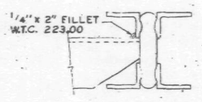
3"X2"L DECK BEAMS TOP ELEVATION BELOW TOP ELEVATION WF BEAM.



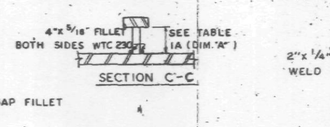
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F5) AND AA20R (FR5-OPP HAND)



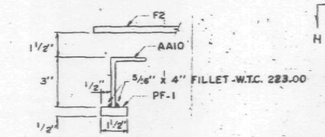
DETAIL "V"



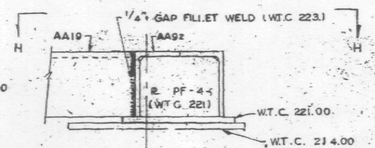
DETAIL "J"



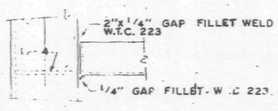
SECTION C-C



SECTION L-L



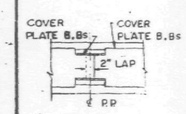
DETAIL "P" (OPP. HAND FOR FR PANEL)



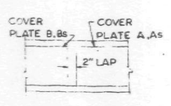
SECTION K-K

TABLE "1A"				
	DIM "A" @ COL. LINE			
	417	443	217	243
45	1 1/2"	0	0	0
46	1 1/2	1 1/2	1/2	1 1/2
47	1 1/2	1 1/2	1/2	1 1/2
48	1 1/2	1 1/2	1/2	1 1/2
49	0	0	0	0
79	0	1 1/2	0	0
80	1 1/2	1 1/2	1 1/2	1 1/2
81	1 1/2	1 1/2	1 1/2	1 1/2
82	1 1/2	1 1/2	1 1/2	1 1/2
83	0	0	0	0

PANEL F5 — F2 USED WHEN DIM "A" = 0"; F8A = 1 1/2"; F2R = 0"; F8AR = 1 1/2"
PANEL FR5

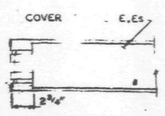


DETAIL "M"

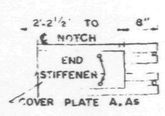


DETAIL "L"

COVER PLATES 29 GA. THICK



DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

NOTE

1. DIMENSION IS 10 3/4" FOR FLOORS 45-49 (SOUTH) 45 (NORTH). AND IS 9 1/4" FOR 79-83 (NORTH).

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F5 & FR5 PANELS

FABRICATION BY: LACLEDE STEEL COMPANY

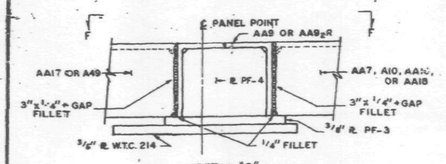
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A83-75 & 76
PLATE

APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 4/24/69
DRAWN BY: D.W.B. DATE JAN. 20, 1969

APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE JAN. 20, 1969
IN CHARGE OF PROD. DEV.

LACLEDE STEEL CO. DETAILED BY: A. CARL WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP - F5-2.

NO.	DATE	REVISION	G.D.C. BY
1	4-9-69	AS NOTED	



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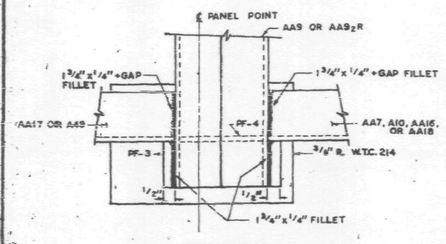
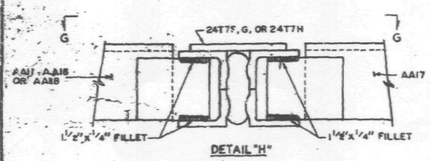


SECTION F-F



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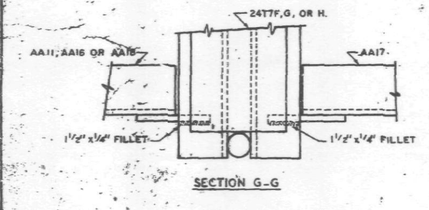

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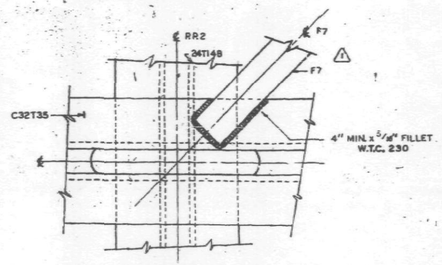

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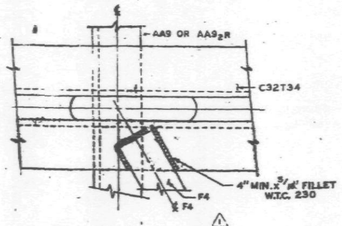

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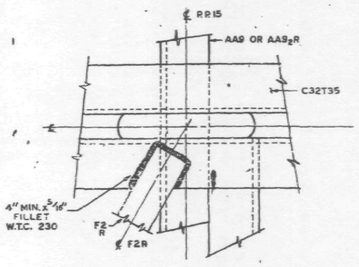

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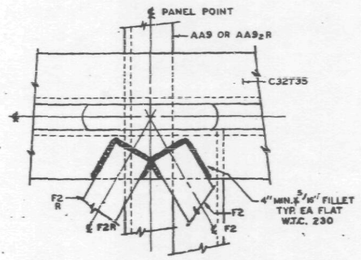

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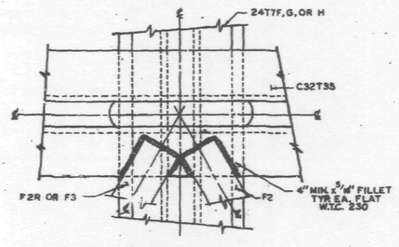

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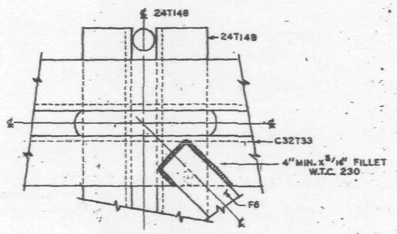

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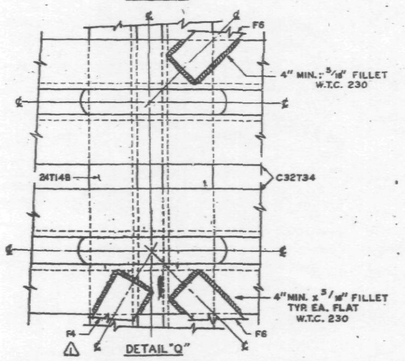

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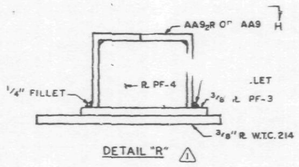

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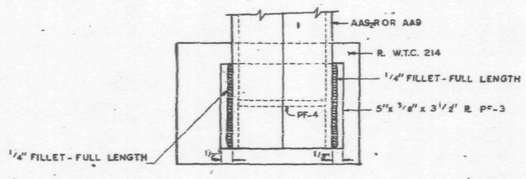
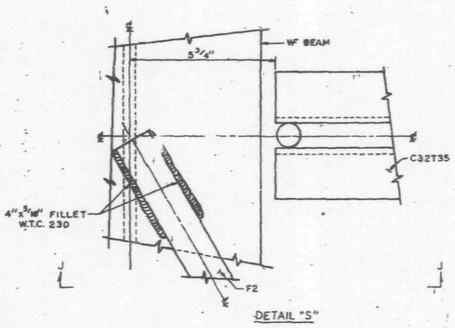


SECTION H-H ⚠



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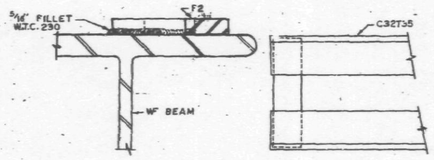
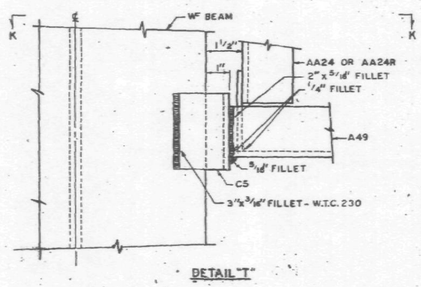


SECTION J-J



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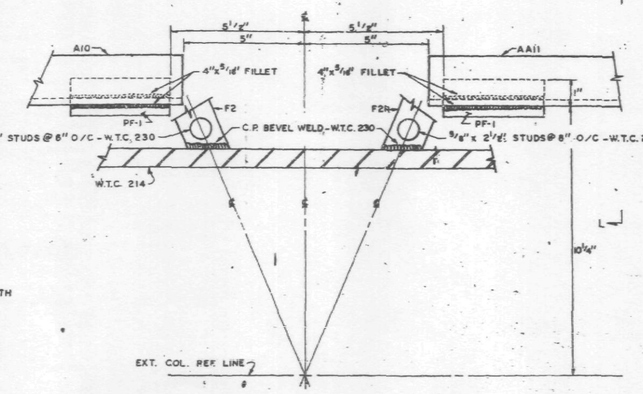
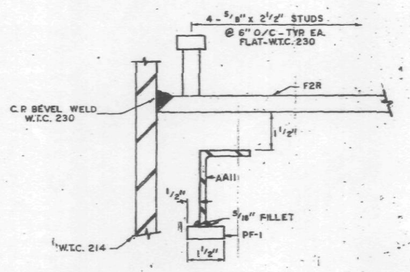
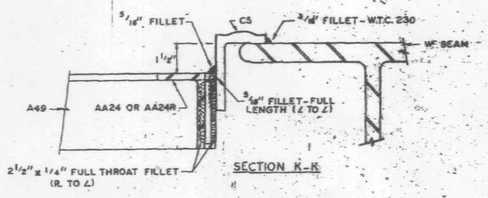


DETAIL "U"



SECTION L-L



SECTION K-K

ALL DETAILS ON THIS SHEET ARE DRAWN FOR PANEL F8. ALL DETAILS MAY BE USED FOR PANEL FR8 IF USED OPPOSITE HAND.

UNLESS OTHERWISE NOTED ALL WELDS ARE TO BE MADE BY W.T.C. 223.

STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

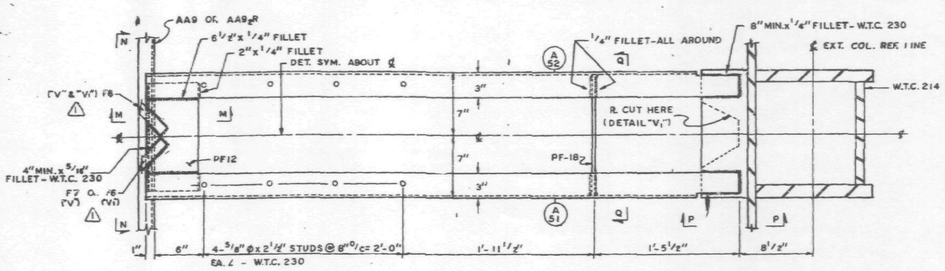
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR PANEL DETAILS FOR PANELS F8 & FR8

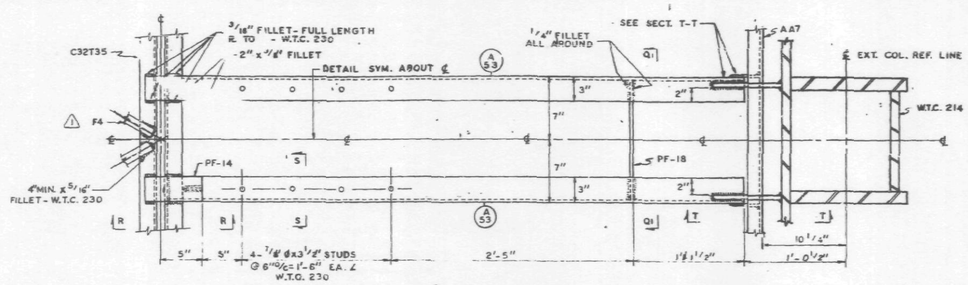
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO: 7-665-92 & 93	PLATE
APPROVED FOR FABRICATION BY: FOR P.D.N.Y.A.	DATE 4/24/69	DRAWN BY: GDC DATE FEB. 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE FEB. 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: [illegible] TO		FABRICATORS CONT. NO. W.T.C. 221	SHEET NO. FP-F8-2

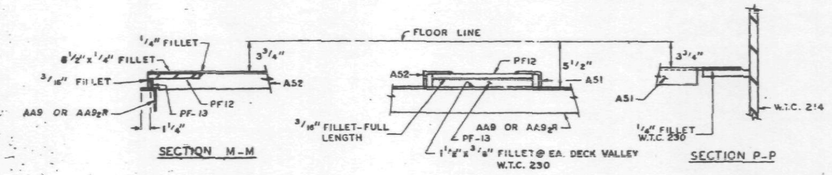
NO	DATE	REVISION	BY
⚠	4-30-69	AS NOTED	G.D.C.

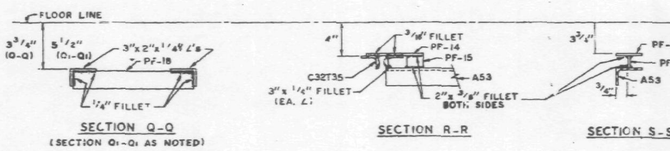


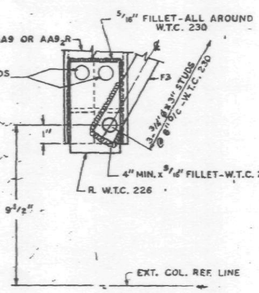
DETAIL "V" (OPP. HAND FOR FR8)
(DETAIL "V1" AS NOTED)



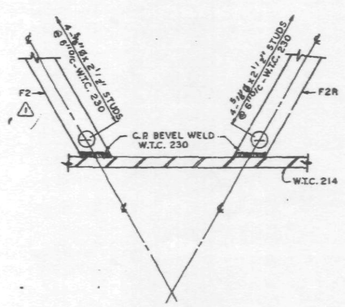
DETAIL "W"



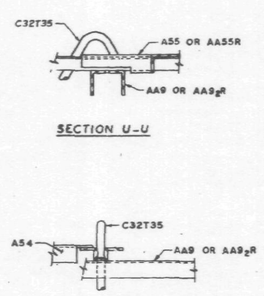




DETAIL "X"
(OPP HAND FOR FR8)

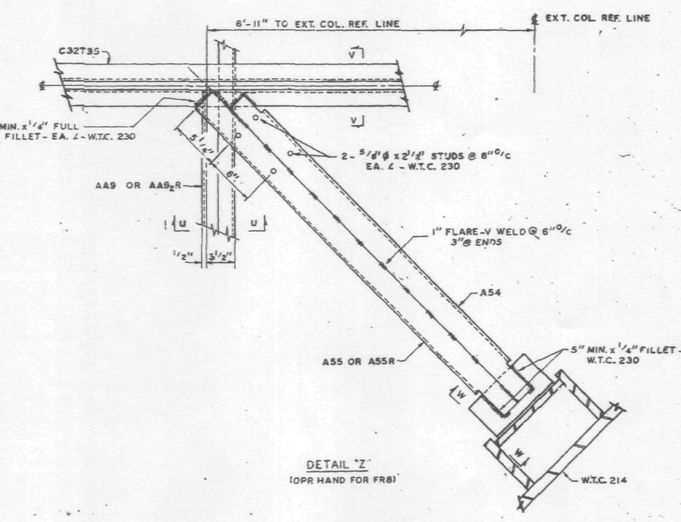


DETAIL "Y"
(OPP HAND FOR FR8)

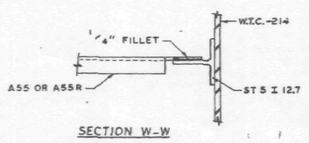


SECTION U-U

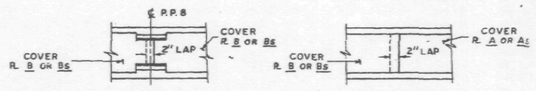
SECTION V-V

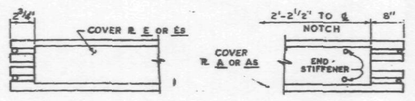


DETAIL "Z"
(OPP HAND FOR FR8)



SECTION W-W





ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS OTHERWISE NOTED ALL ARC WELDS BY W.T.C. 223.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

REF. DRWGS.

7-AB3-62	-20-69	7-AB4-45.1	11-25-68
7-AB3-[illegible]	1-20-69	7-AB4-21	1-6-69
5A-124	1-6-69	7-AB4-22	1-6-69
7-AB1-30	1-6-69	7-AB4-22.1	7-22-69
7-AB1-31	1-6-69	7-AB4-23	7-22-69
7-AB1-48	1-6-69	7-AB4-24	10-15-69
7-AB2-18	1-6-69	7-AB4-26	7-22-69
7-AB2-9	1-8-69		
7-AB4-31.1	1-20-69		
7-AB4-34.1	1-20-69		
7-AB4-35.3	1-20-69		

NO.	DATE	REVISION	BY
1	4-10-69	AS NOTED	G.D.C.

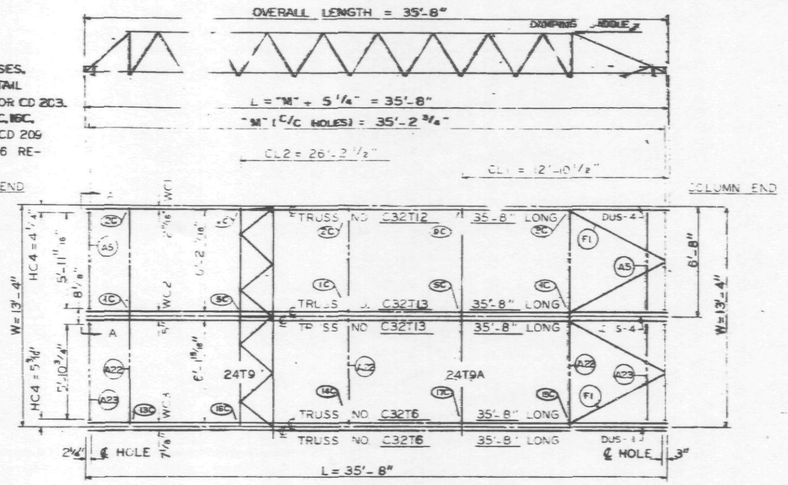
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR PANEL DETAILS FOR PANELS F8 & FR8.

FABRICATION BY: LACLEDE STEEL COMPANY

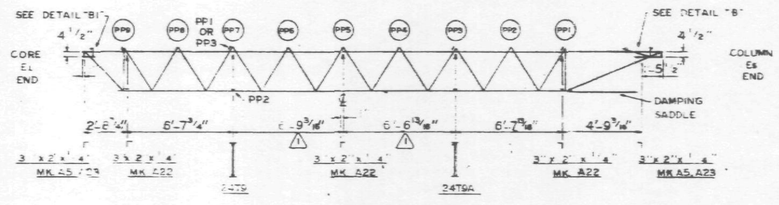
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-62 & 63	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 4/14/69	DRAWN BY: gdc DATE FEB. 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.N.CHURA DATE FEB. 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F8 3

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 204, CD 202 OR CD 203. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.

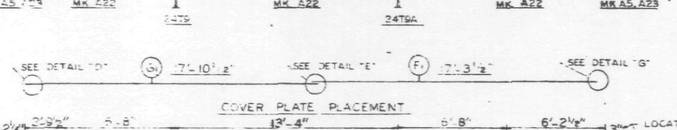


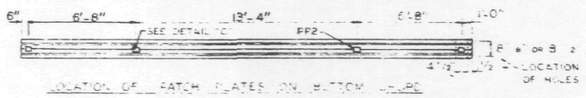
PANEL G1 SIZE 13'-4" x 35'-8"

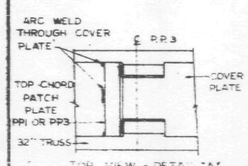
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

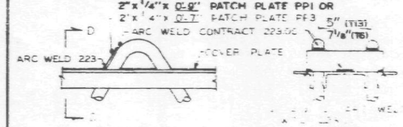


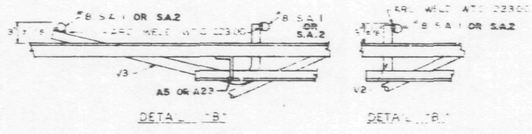
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

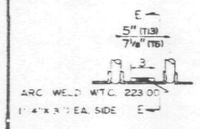




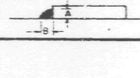


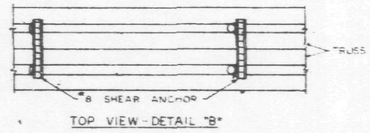


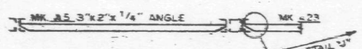




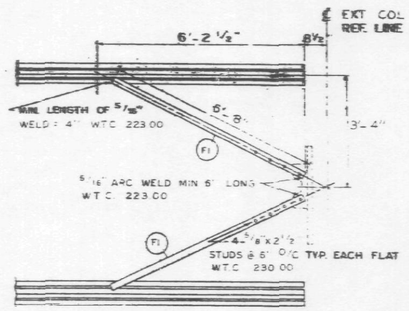
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



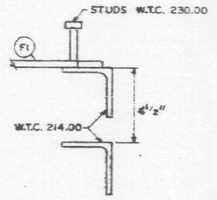




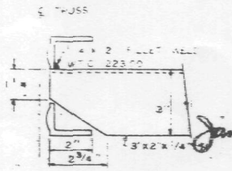
COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 203
	T12	1	C32T12 - 35'-8"	ST 203
	T13	2	C32T13 - 35'-8"	ST 203
BRIDGING TRUSSES	T9	1	24T9 - 13'-2	BT 208
	T9A	1	24T9 13'-2 3/16"	BT 208A
3"x 2" x 1/4" ANGLE	A5	2	x2"x1/4"x8'-1 15/16"	ST 405
	A22	3	3"x2"x1/4"x13'-3 1/2"	ST 405
	A23	2	3"x2"x1/4"x 6'-0 7/8"	ST 405
DIAGONAL FLAT	F1	4	1 1/2" x 5/16" 8'-8"	ST 402
PATCH PLATES	PP1	4	2" x 1/4" x 0'-9"	ST 203
	PP2	8	2" x 3/8" x 0'-3"	ST 203
	PP3	4	2" x 1/4" x 0'-7"	ST 203
COVER PLATES	G1	1	7" x .0135" x 17-10 1/2"	ST 203
	F1	1	7" x .0135" x 17'- 3 1/2"	ST 203
	G	1	8" x .0135" x 17'-10 1/2"	ST 203
	F	1	8" x .0135" x 17'-3 1/2"	ST 203
ANGLE CLIPS	C2	8	2 1/2" x 1 1/2" x 1/4" x 6"	ST 401
	C1	2	2" x 1 1/2" x 1/4" x 6"	ST 401
" 8 SHEAR ANCHOR	SA1	3	" 8 SHEAR x 0'-7"	ST 203
	SA2	3	" 8 SHEAR x 0'-8"	ST 203
DAMPING SADDLE	DUS-4	1	3 1/2" x 3 1/2" x 3/16" x 3'-10"	ST 203
	DUS-1	1	3 1/2" x 3 1/2" x 3/16" x 3'-10"	ST 203
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

NO.	DATE	REVISION	BY
1	2-21-69	AS NOTED	

REF. DRWG.		
7-AB4-3 & 31	1-3-68	
7-AB4-15 & 16	3-9-66	
7-AB4-39-41	1-3-68	
SA-124	10-20-67	
7-AB3-2	1-3-68	
7-AB1-11 & 12	5-10-68	
7-AB2-6	2-15-68	
AB4-42	4-1-68	

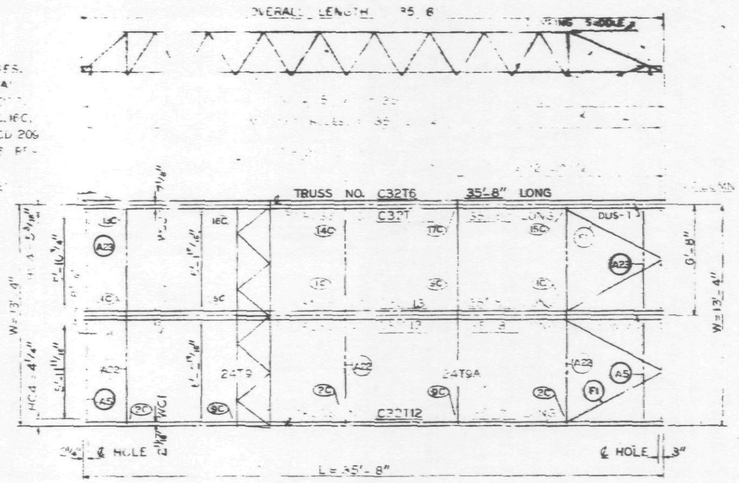
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A: FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & 93-106 (EAST & WEST) PANEL G1 - 13'-4" x 35'-8"
45-49 (WEST) 80-83 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

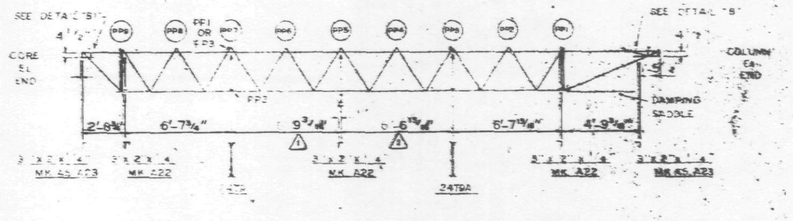
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-15 5-10-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE 4/29/69	DRAWN BY	
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DATE APRIL 10, 1969	
DETAILED BY A.C. WEBER		CHECKED BY DATE APRIL 10, 1969	
		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-G1

LETTERS AND NUMBERS IN ELLIPSES, ie (12), INDICATE CONNECTION DETAIL SHOWN ON SHEET [illegible]. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 206, CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.

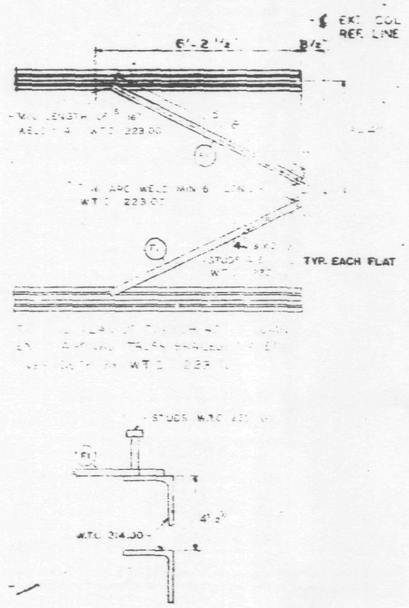


PANEL GR1 SIZE- 13'-4" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH 8"T NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	DWG
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST [illegible]
	T13	2	C32T13 - 35'-8"	ST [illegible]
BRIDGING TRUSSES	T9	1	24TS - 13'-2¾"	BT 209
	T9A	1	24TSA - 13'-2¾"	BT 209A
BEARING ANGLE	A5	2	3"x2"x¼" x 6'-1¹³⁄₁₆"	ST 403
	A22	1	3"x2"x¼" x 13'-3⅛"	ST 405
	A23	2	3"x2"x¼" x 6'-2¹³⁄₁₆"	ST 405
ANGLE CLIPS	F1	4	4"x4"x¼" x 6'-8"	ST 402
DECK PLATES	PP1	4	2"x1'-4"x 0'-8"	ST 400
	PP2	8	3"x1'-8"x 0'-3"	ST 400
	PP3	4	2"x1'-4"x 0'-7"	ST 400
COVER PLATES			7"x0.135"x 17'-10½"	ST 303
	F1	1	7"x0.135"x 17'-3½"	ST 303
	G	1	9"x.0135"x 17'-10½"	ST 303
	F	1	9"x.0135"x 17'-3½"	ST 303
ANGLE CLIPS	C2	6	2½"x1½"x¼"x 6"	ST 400
	C1	2	2"x1½"x¼"x 6"	ST 400
STUD SHEAR ANCHOR	SA1	3	⅞" REBAR x 0'-7"	ST 400
	SA2	3	⅞" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-2	1	3½"x3½"x¼"x3⅛" & 3½"x3½"x¼"x3⅛"	ST 298
	DUS-1	1	3½"x 3½"x¼"x3⅛" & 3½"x3½"x¼"x3⅛"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 274

COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.

NO.	DATE	REVISION
1	2-21-69	AS NOTED

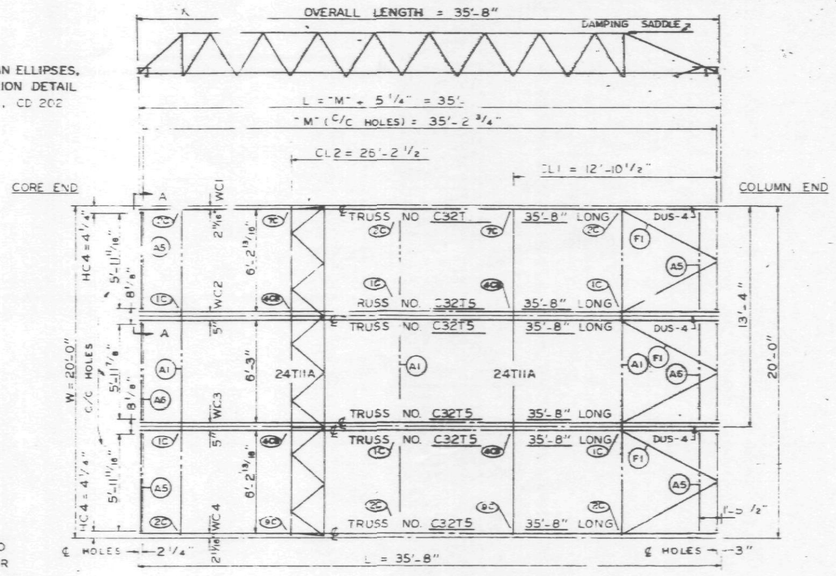
DRAWN	3-68
CHECKED	5-6-68
TRACED	3-68
SUBMITTED	10-20-67
APPROVED	11-3-68
	5-10-68
	4-1-68
	4-1-68

63-101 (EAST & WEST) 68-74, 84-91 &
79-83 (WEST) 46-49 (EAST) PANEL GR1 - 13'-4" x 35'-8"

DRAWING NO. 83-85 5-10-68 PLATE
DRAWN BY B.S.
CHECKED BY T.M. [illegible]
DATE APRIL '[illegible]
APPROVED DATE 2-21
SHEET NO FP-GR1

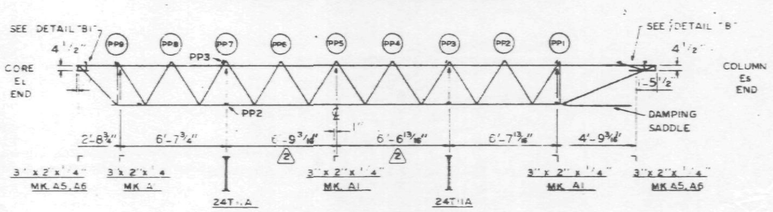
NOTE: ALL [illegible] UNLESS SHOWN THE FILLET WELD CONNECTION AT WELDS SHALL BE ¼" FULL THROAT FILLET.

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD 202 OR CD 203.

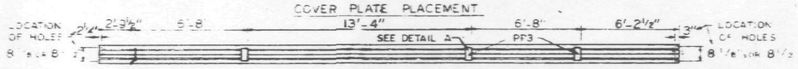


PANEL NO. H1 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

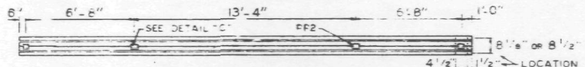


COVER PLATE PLACEMENT

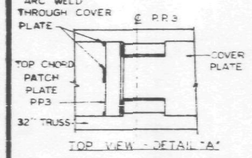


* PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY

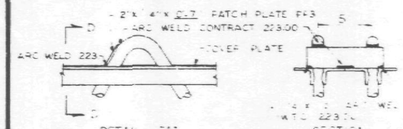
LOCATION OF PATCH PLATES ON TOP CHORD

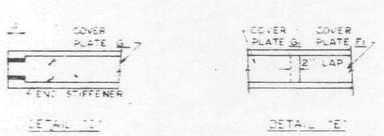


LOCATION OF PATCH PLATES ON BOTTOM CHORD

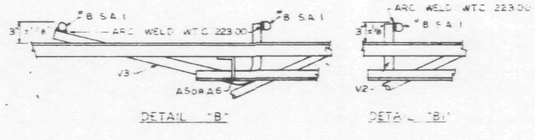


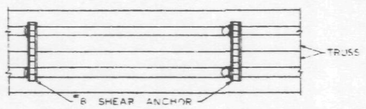
TOP VIEW - DETAIL "A"



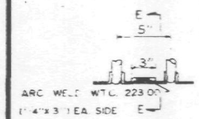


COVER PLATES 28 GA THICK





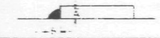
TOP VIEW - DETAIL "B"



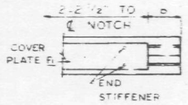
DETAIL "C"

SECTION E-E

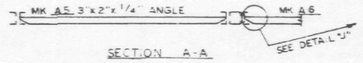
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 4" x FULL THROAT FILLET.



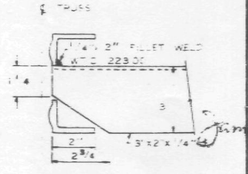
FIELD PUSH COVER PLATE OVER END STIFFENER W.T.C. 223.00



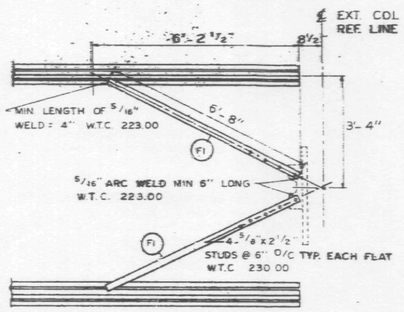
DETAIL "G"



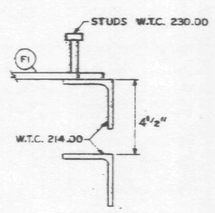
SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK.	PCS.	SIZE	REF.
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	
BRIDGING TRUSSES	T11A	2	[illegible] - 19'-11"	ST403
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST403
	A5	4	3"x2"x1/4" x 5'-11 7/16"	ST403
	A6	2	3"x2"x [illegible] x 6'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2"x 5 [illegible] x 6'-8"	ST402
PATCH PLATES	PP3	12	2"x 1/4" x 0'-7"	ST 400
	PP2	12	3"x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	3	7"x.0135"x 17'-10 1/2"	ST 308
	F1	3	7"x.0135"x 17'-3 1/2"	ST 308
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
* 8 SHEAR ANCHOR	SA1	9	8 REBAR x 0'-7"	ST 400
DAMPING SADDLE (1)	DUS4	3	3 1/2" x 3 1/2" x 3/8" x 3'-6"	ST298
CONNECTION BAR	CB1	2	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES (1)	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P7	2	6 1/2" x 1 1/2" x 1'-0"	ST 401

NO.	DATE	REVISION	BY
2	2-21-69	AS NOTED	GDC
1	10-16-68	MATERIAL LIST	GDC

REF. DRAWS

7-AB4 3 & 31	1-3-68
7-AB4 5 & 6	5-6-68
7-AB4 39-41	1-3-68
SA 124	10-20-67
7-AB3-2	1-3-68
7-AB [illegible] & 3	5-10-68
7-AB2 6	2-15-68
7-AB4 42	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68 74, 84-91 & 93-106 (EAST & WEST) PANEL H1 - 20'-0" x 35'-8"
45-49 (WEST) 80-83 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-AB3-17 F-10-68 PLATE

APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE 6/28/69

DRAWN BY B.B DATE APRIL 10, 1968

APPROVED FOR FABRICATION BY _____ FOR FABRICATOR DATE

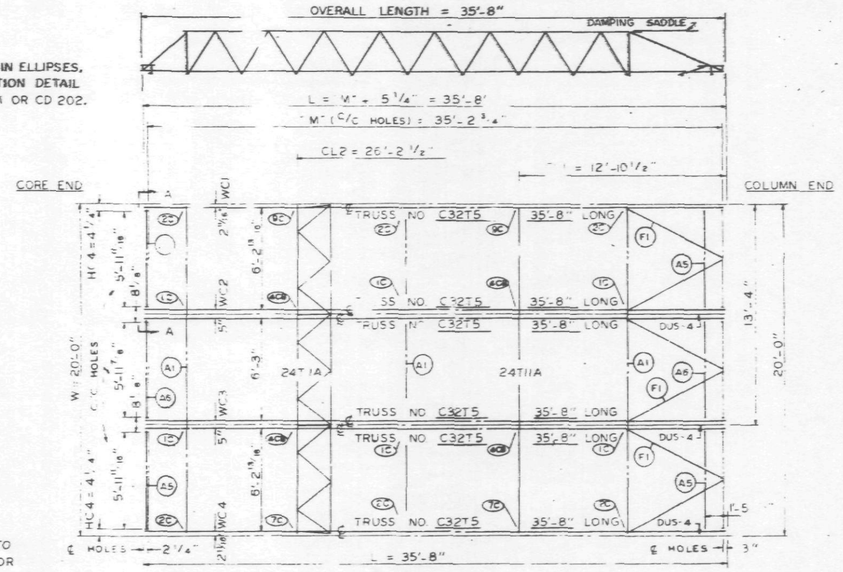
CHECKED BY T.M CHURA DATE APRIL 10, 1968

DETAILED [illegible]

FABRICATION CONT NO W.T.C. 221

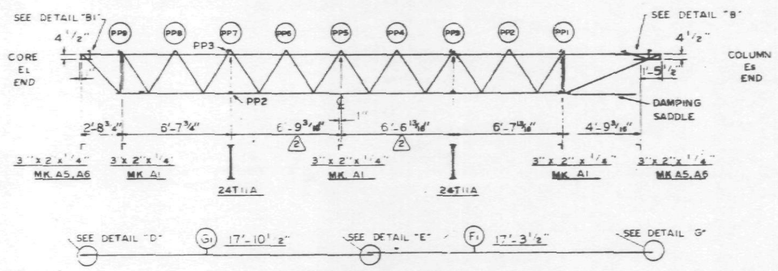
SHEET NO FP-H1

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

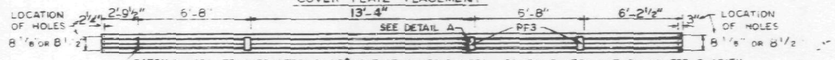


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. HR1 SIZE 20'-0" x 35'-8"

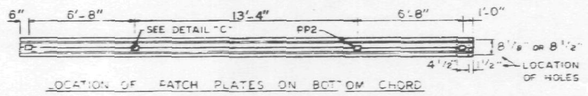


COVER PLATE PLACEMENT

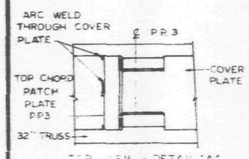


℄ PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

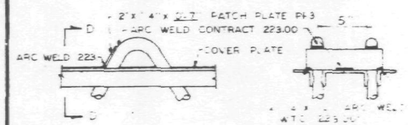
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

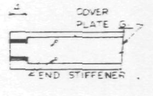


TOP VIEW - DETAIL "A"

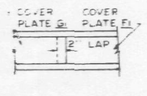


DETAIL "A"

SECTION D-D

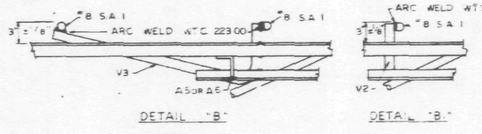


DETAIL "G"



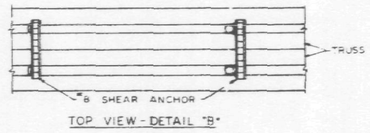
DETAIL "E"

COVER PLATES 29 GA. THICK

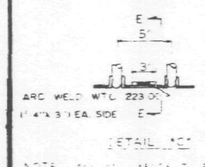


DETAIL "B"

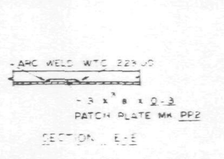
DETAIL "B"



TOP VIEW - DETAIL "B"



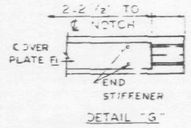
DETAIL "C"



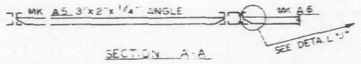
SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS OF THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE 1/4" x FULL THROAT FILLET.

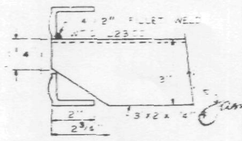
FIELD PLACED COVER PLATE OVER END STIFFENER W.T.C. 223.00



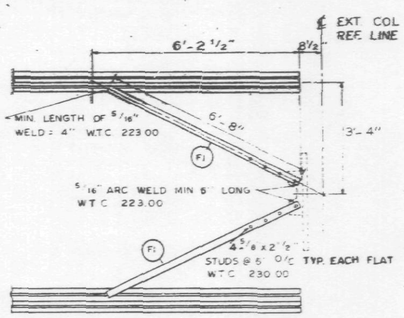
DETAIL "G"



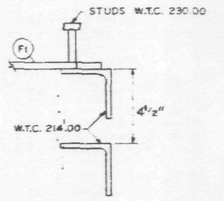
SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-9" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRAWING
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A 19'-11"	BT211A
3" x 2" x 1/4" ANGLE	A1	3	3 x 2" x 1/4" x 19'-11"	ST 203
	A5	4	3" x 2" x 1/4" x 6'-1 7/16"	ST 403
	A6	2	3" x 2" x 1/4" [illegible]'-2"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 5/[illegible]" x [illegible]'-8"	ST 402
PATCH PLATES	PP3	12	[illegible] x 1/4" x 0'-7"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	1	7" x .0135" x 17'-10 1/2"	ST 303
	F1	1	7" x .0135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
8" SHEAR ANCHOR	SA1	9	8" REBAR x 0'-7"	ST. 400
DAMPING SADDLE	DUS-4	3	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	2	1" ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
⚠1	P7	2	6 1/2" x 1/2" x 1'-0"	ST 401

NO.	DATE	REVISION	BY
/2	2-21-69	AS NOTED	S.D.C.
/1	10-16-68	LIST OF MATERIAL	S.D.C.

REF DRWG		
7-AB4-3 & 3.1	1-3-68	
7-AB4-5 & 16	5-8-68	
7-AB4-39-41	1-3-68	
SA-124	10-20-67	
AB3-2	1-3-68	
7-AB1-11 & 12	5-10-68	
7-AB2-6	2-15-68	
7-AB4-42	4-1-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

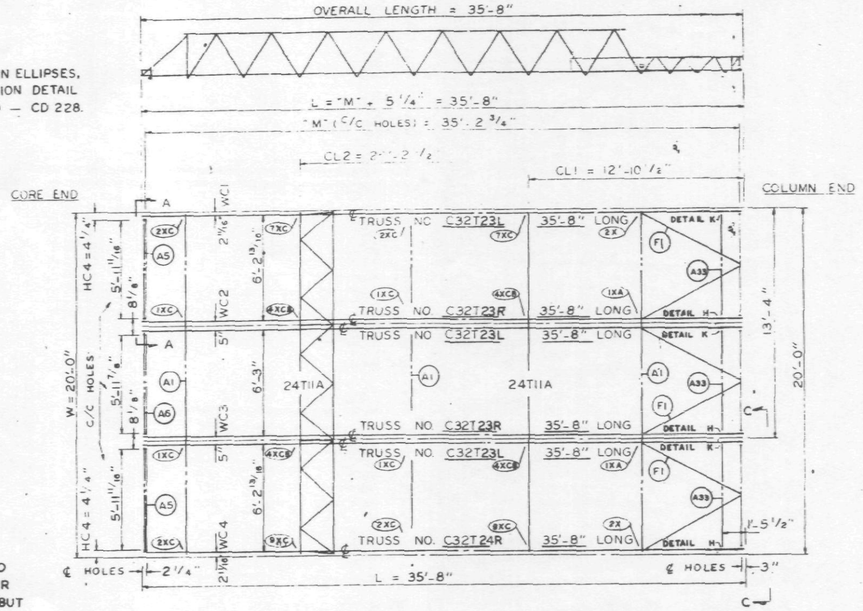
BLDG A FLOORS 10-24, 26-42 EAST & WEST 46-49, 50-58, 60-66, 68-74 (EAST) PANEL HR1 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-18 5-10-68 PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 2/28/69	DRAWN BY [illegible] DATE APRIL 15, 1968
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 15, 1968
DETAILED BY [illegible]		FABRICATION CONT NO. W.T.C. 221

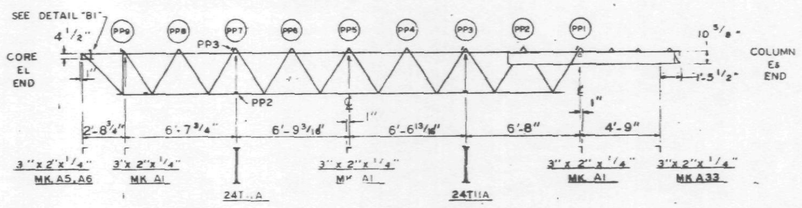
SHEET NO. FP-HR1

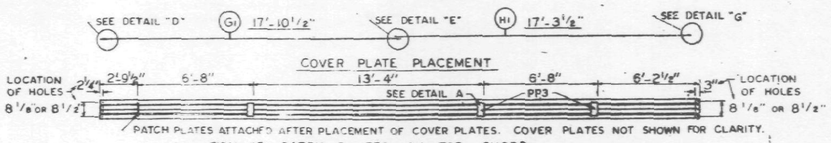
LETTERS AND NUMBERS IN ELLIPSES, (A1) (A5), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.



PANEL NO. H2 SIZE 20'-0" x 35'-8"

DIMENSION HC4 ARE RELATED TO PUT IN BEARING END OF FLOOR WHICH ARE SIMILAR WITH BUT EXACTLY ALIGNED WITH HOLE ℄ COLUMN CLIPS & BRACES.

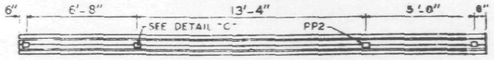




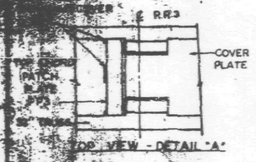
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD

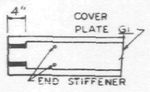


LOCATION OF PATCH PLATES ON BOTTOM CHORD

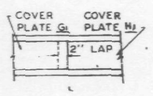


TOP VIEW - DETAIL "A"

DETAIL "A" SECTION D-D

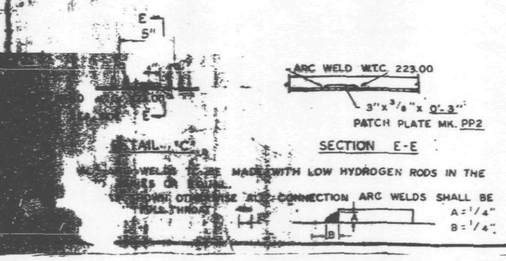


DETAIL "D"

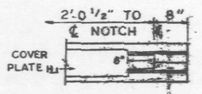


DETAIL "E"

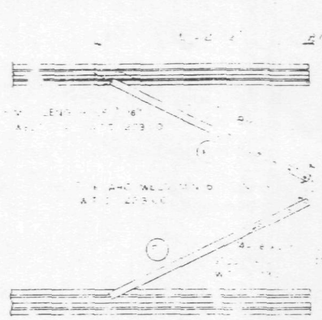
COVER PLATES 29 GA. THICK



FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

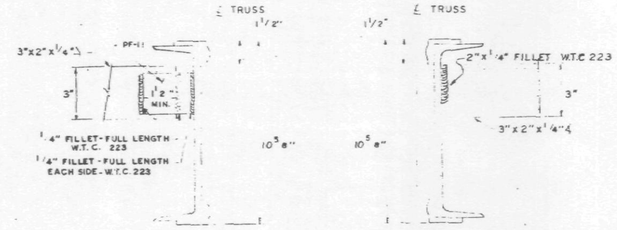


DETAIL "G"

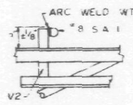


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

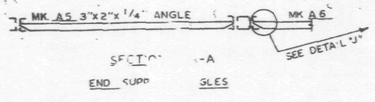
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST 223L
	T23R	2	C32T23R - 35'-8"	ST 223L
	T24R	1	C32T24R - 35'-8"	ST 224L
BRIDGING TRUSSES	T-A	2	24 T11A - 19'-11"	ST 211A
3" x 2" x 1/4" ANGLE	A	3	3" x 2" x 4" x 19'-11"	ST 403
	A5	2	3" x 2" x 4" x 6'-1 13/16"	ST 403
	A6	1	3" x 2" x 4" x 6'-2"	ST 403
	A33	3	3" x 2" x 1/4" x 5'-10 1/2"	ST 410
PATCH PLATES	PP3	12	2" x 1/4" x 0'-7"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	3	7" x 0.135" x 17'-10 1/2"	ST 303
	H1	3	7" x 0.135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
3/8" SHEAR STUDS	SA1	3	3/8" ø STUD x 0'-5"	ST 400
DIAGONAL FLATS	F1	5	1 1/2" x 5/8" x 6'-8"	ST 402
CONNECTION BAR	CB1	3	1" x 1" x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P7	2	6 1/2" x .50" x 1'-0"	ST 401
CLOSURE PLATE	PF11	3	3" x 1/4" x 0'-2 3/8"	ST 412



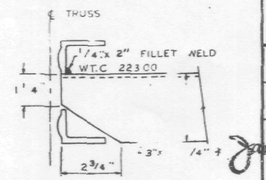
SECTION C-C
END SUPPORT ANGLE



DETAIL "B1"



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF. DRWG		
7-AB4-3		10-5-68
7-AB4-5 & 16		7-22-68
7-AB4-15.2		10-4-68
SA-124		10-6-68
7-AB3-38		10-4-68
7-AB1-22		10-4-68
7-AB2-6		7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

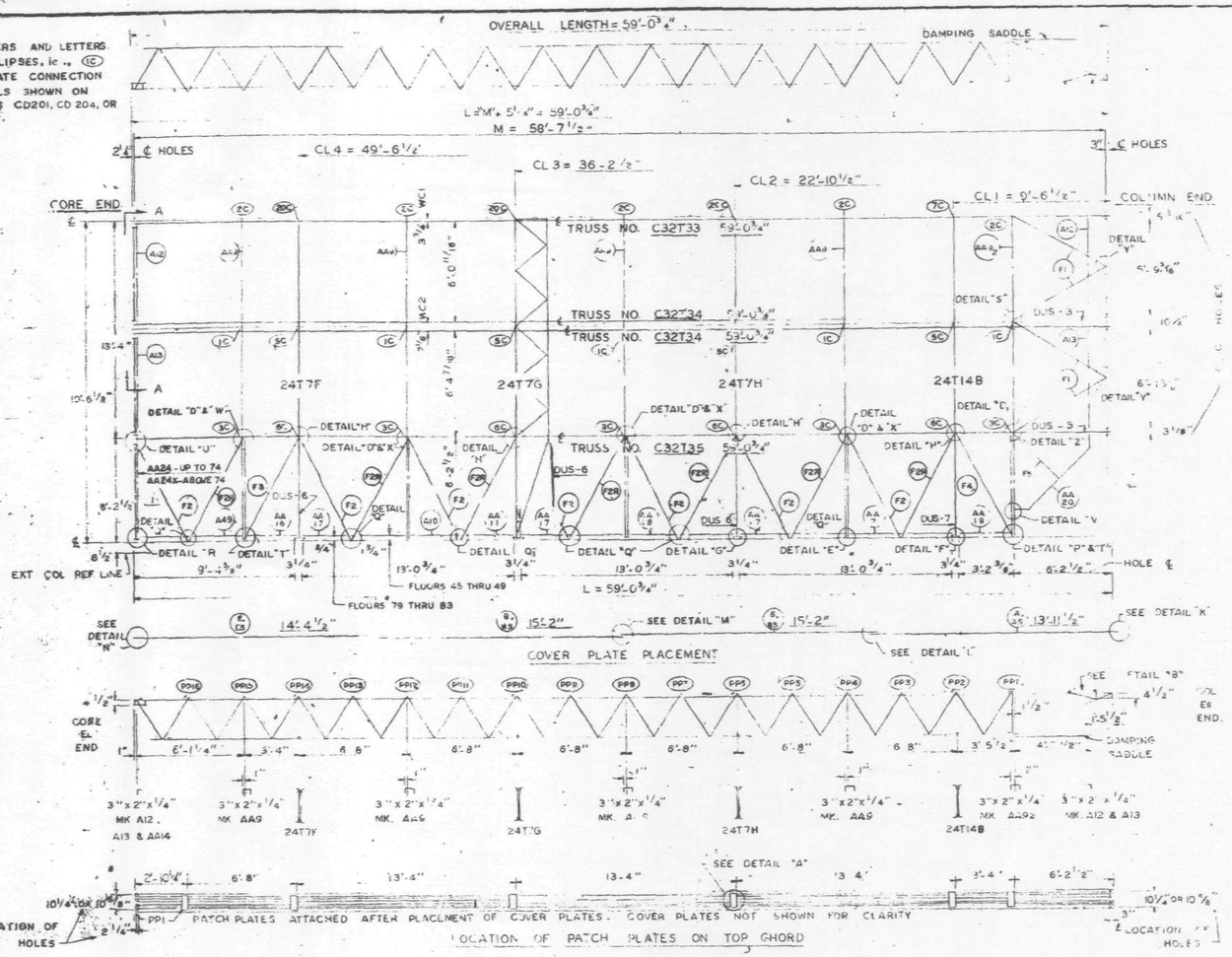
BLDG. B FLOORS 25, 59, 92, (NORTH & SOUTH)

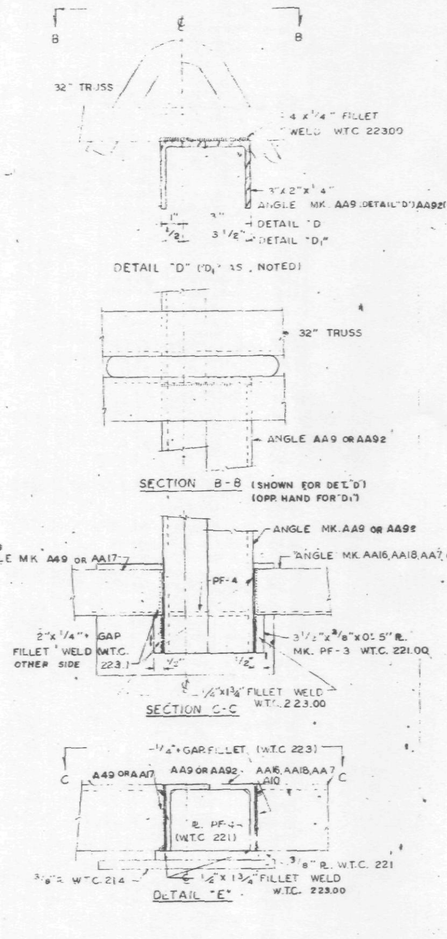
PANEL H2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-38	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 7/10/69	DRAWN BY [illegible] DATE JULY 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JULY 3, 1969	
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET FP-H2

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 204, OR CD 229.



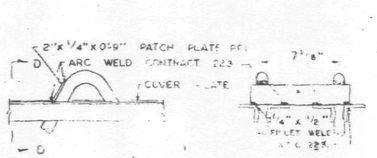


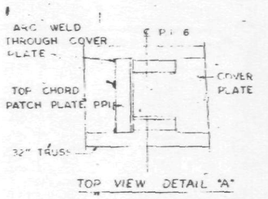
REQUIRED MATERIAL, PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T33	1	C32T33 - 59'-0 3/4"	ST 233
	T34	2	C32T34 - 59'-0 3/4"	ST 234
	T35	1	C32T35 - 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F - 19'-6"	BT 207F
	T7G	1	24T7G - 19'-6"	BT 207G
	T7H	1	24T7H - 19'-6"	BT 207H
	T14B	1	24T14B - 19'-6"	BT 214B
3"x2"x1/4" ANGLES	A1/3	1	3"x2"x1/4"x 2'-7 15/16"	ST 404
	A12	2	3"x2"x1/4"x 5'-11 15/16"	ST 404
	A13	2	3"x2"x1/4"x 6'-3 15/16"	ST 404
	A49	1	3"x 2"x1/4"x 1'-0 15/16"	ST 413
ANGLE ASSEMBLY (AA24 IS REPLACED BY AA24X ABOVE FLR. 74) ⚠1	AA7	1	SEE REF. DRWG.	ST 404
	AA9	4	SEE REF. DRWG.	ST 404
	AA92	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG.	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA19	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST 402
	F2, F2A	7	1 1/2"x 5/8"x 6'-10 1/2"	ST 402
	F3	1	1 1/2"x 5/8"x 6'-11 1/4"	ST 402
	F4	1	1 1/2"x 5/8"x 7'-0	ST 402
	F5	1	1 1/2"x 5/8"x 4'-4"	ST 402
PATCH PLATES	PP1	5	2"x 1/4"x 0'-9"	ST 400
	PP2	5	3 3/8"x 0'-3"	ST 400
COVER PLATES	A	1	9"x 0.135"x 13'-11 1/2"	ST 303
	B	2	9"x 0.135"x 15'-2"	ST 303
	E	1	9"x 0.135"x 14'-4 1/2"	ST 303
	A5	1	3 1/8"x 0.135"x 13'-11 1/2"	ST 303
	B5	2	3 1/2"x 0.135"x 15'-2	ST 303
	E5	1	3 1/2"x 0.135"x 14'-4 1/2"	ST 303
ANGLE CLIPS ⚠1	C2	4	2 1/2"x 1"x 1/4"x 0'-6"	ST 400
	C1	12	2"x 1 1/2"x 1/4"x 0'-6"	ST 400
DAMPING SADDLE	DUS-3	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST 298
	DUS-5	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST 299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST 299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST 299
MISC. PLATES	PF-1	2	1 1/2"x 1/2" x 0'-4"	ST 400
	PF-3	5	3 1/2"x 3/8"x 0'-3"	ST 400
CONN ANGLE	C5	1	3 x 2" x 3/16" x 0'-3"	ST 413
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST 405
"B SHEAR ANCHOR	SA2	2	"B REBAR x 0'-9"	ST 400

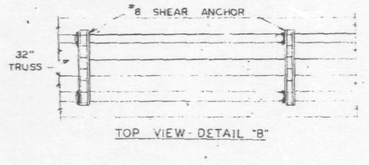
NO	DATE	REVISION	BY
⚠1	4-8-69	AS NOTED	G.D.C.

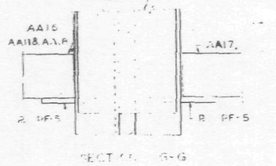
REF. DRWG. 1

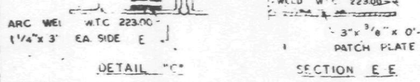
7-A61-30	1-6-69	SA-124	1-6-69
7-A61-31	1-6-69	7-AB4-14,16,1	10-15-68
7-A61-32	1-6-69	7-AB4-15,16	7-22-68
7-A92-9	1-6-69	7-AB4-21	7-22-68
7-AB2-16	1-6-68	7-AB4-23,25	7-22-68
7-AB3-41	1-6-69	7-AB4-29	1-3-69
7-AB3-51	1-6-69	7-AB4-39-41,43	7-22-68
7-AB4-3	10-15-68	7-AB4-42	10-15-68
		7-AB3-45	12-20-68

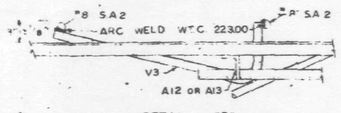


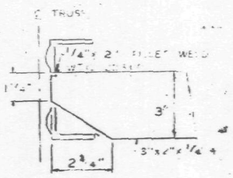












NOTE : ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2 UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
SEE SHEET FP-F3-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

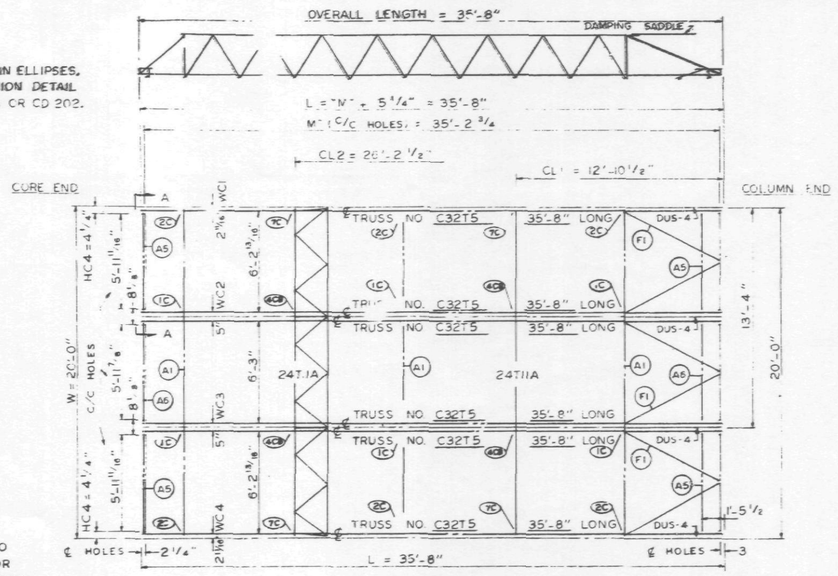
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (NORTH & SOUTH) 44 (NORTH)
PANEL F3 19'-5" x 59'-0 3/4"
BLDG. B FLOORS 44 & 78 (EAST & WEST)

FABRICATION BY: LACLEDE STEEL COMPANY

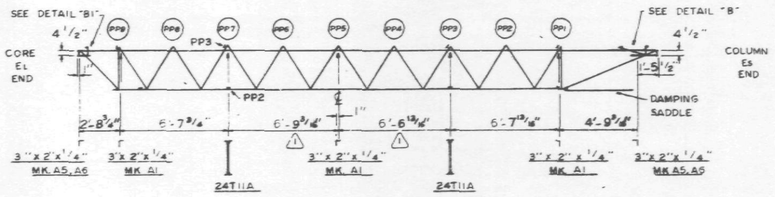
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB4-31	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 4/25/69	DRAWN BY: DWB DATE JAN. 17, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE JAN. 17, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F3

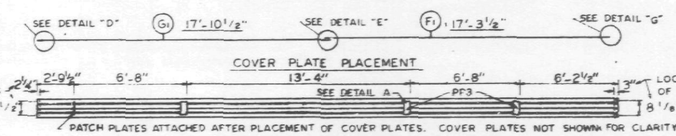
LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

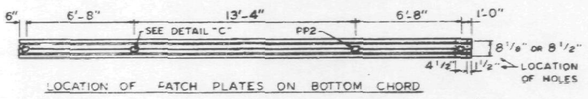


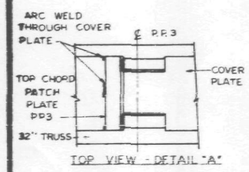
PANEL NO. J1 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

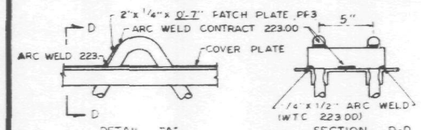








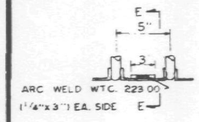
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

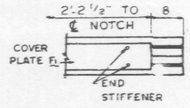
COVER PLATES 29 GA. THICK



DETAIL "C"

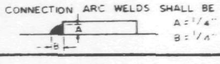
SECTION E-E

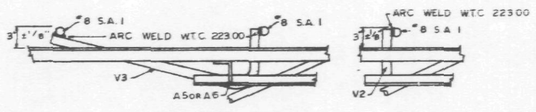
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

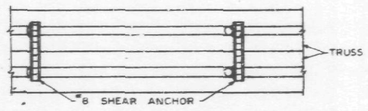


DETAIL "G"

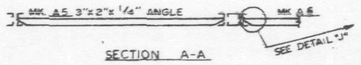
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



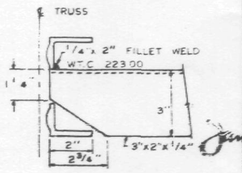




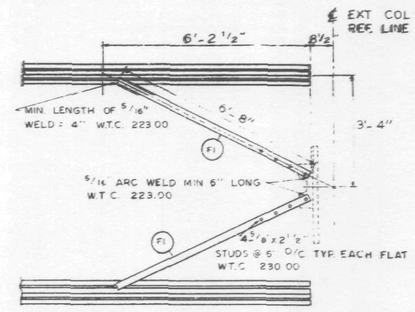
TOP VIEW - DETAIL "B"



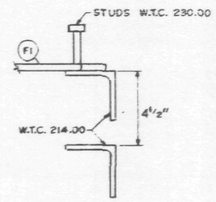
SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 11"	ST211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-7"	ST403
	A5	4	3"x2"x1/4"x 6'-[illegible]"	ST403
	A6	2	3"x2"x1/4"x [illegible]	ST403
DIAGONAL FLATS	F1	6	1" 2"x[illegible]	ST402
PATCH PLATES	PP3	16	2" x 0'-7"	ST 400
	PP2	16	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	4	7"x.0135"x17'-10 1/2"	ST 303
	F1	4	7"x.0135"x17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2 x 3/16" x 8"	ST 400
#8 SHEAR ANCHOR	SA1	12	#8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	4	3 1/2" x 3 1/2" x 3/16" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	6	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	2-21-69	AS NOTED	G.D.C.

REF. DRWG
- 7-AB4-3 & 3: 1-3-68
- 7-AB4-5 & 16: 5-6-68
- 7-AB4-39-41: 1-3-68
- SA-24: 10-20-67
- 7-AB3-2: 1-3-68
- 7-AB1-11 & 12: 5-10-68
- 7-AB2-6: 2-15-68
- 7-AB4-42: 4-1-68

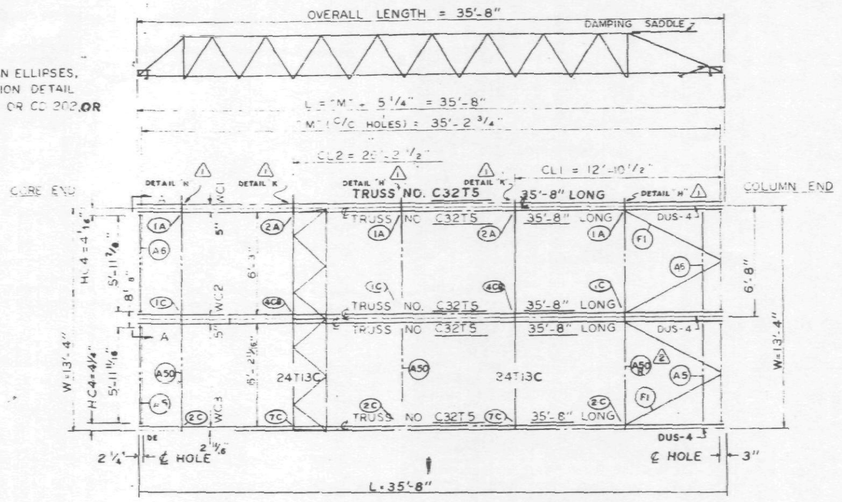
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & 93-106 (EAST & WEST) PANEL J1 - 20'-0 x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

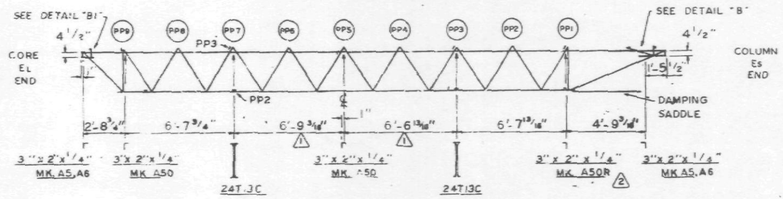
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3 & 5-10-68	PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 6/20/69	DRAWN BY R.B. DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APRIL 10, 1968	
DETAILED BY A.C. WEBER	LACLEDE STEEL CO.	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-J1

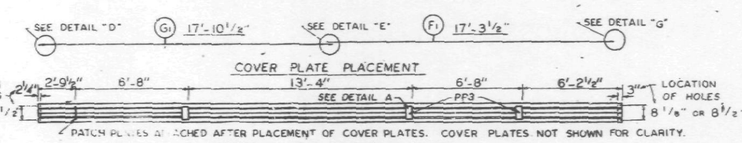
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD229

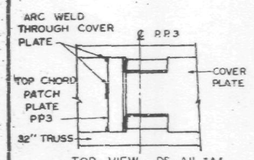


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

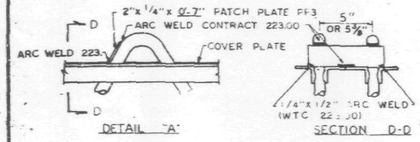
PANEL NO. M1 SIZE 13'-4" x 35'-8"



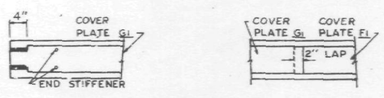




TOP VIEW - DETAIL "A"

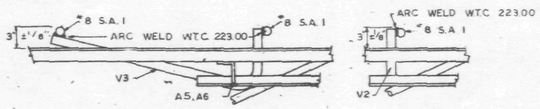


DETAIL "A" SECTION D-D

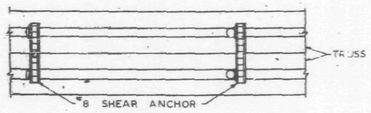


DETAIL "D" DETAIL "E"

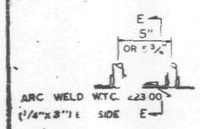
COVER PLATES 29 GA. THICK



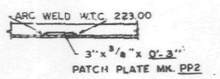
DETAIL "B" DETAIL "B1"



TOP VIEW - DETAIL "B"

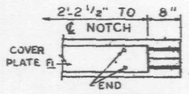


DETAIL "C"



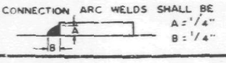
SECTION E-E

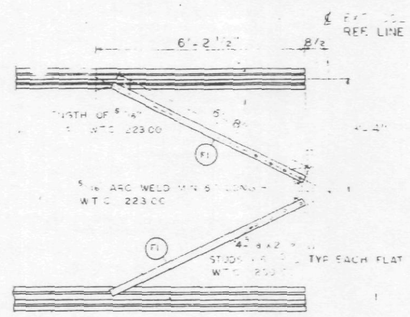
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



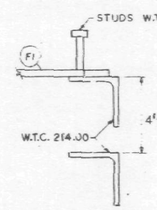
DETAIL "G"

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE x 1" FULL THROAT

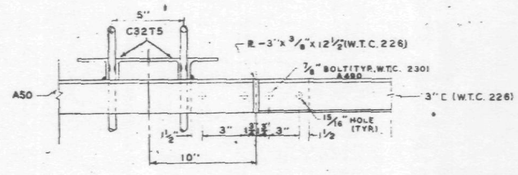


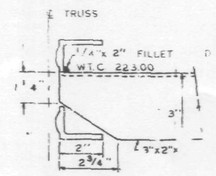


TYPICAL PLAN OF TOP CHORD SHOWING END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

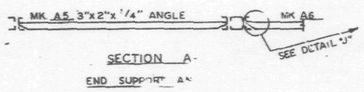


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.





DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A- END SUPPORT AN

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1 1/2	BT213C
3"x2"x1/4" ANGLE	A50 (2)	2	3"x2"x1'-4"x1A5-1 1/4"	ST413
	A50R	1		
	A5	2	3"x2"x1'-4"x6-13/16"	ST403
	A6	2	3"x2"x1 1/4"x6'-2"	ST403
DIAGONAL FLATS	F1	4	1'-2"x 5/8"x 6'-8"	ST402
PATCH PLATES	PP3	12	2"x 0'-4" x 0'-7"	ST400
	PP2	12	3"x 3/8"x 0'-3"	ST400
COVER PLATES	G1	3	7"x 0.135"x 17'-10 1/2"	ST303
	F1	3	7"x 0.135"x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	8	2 1/2" x 1 1/2" x 1/4" x 6"	ST400
"B" SHEAR ANCHOR	SA1	9	7/8" ℄ REBAR x 0'-7"	ST400
DAMPING SADDLE	DUS-4	6	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	2	1" ℄ x 1'-3"	ST400
CONNECTION PLATES	F1	3	3/8"x 3/8" x 0'-6 1/2"	ST400
	P2	2	4 1/2" x .39" x 0'-9"	ST400
	P3	2	4 1/2" x .30" x 1'-0"	ST400
	PI4	2	3" x 1/2" x 0'-11"	ST409

NO.	DATE	REVISION	BY
(2)	4-18-69	AS NOTED	GDC
(1)	3-11-69	AS NOTED	GDC

REF. DRWG.

7-AB3-22	7-22-68
7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49 (WEST), 80-83 (EAST)

PANEL M1 - 13'-4" x 35'-8"

BLDG. B FLOORS 15-49 (SOUTH) 80-83 (NORTH) (2)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-22 PLATE

APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY [illegible] DATE 4/21/69

DRAWN BY [illegible] DATE 1-29-69

APPROVED FOR FABRICATION BY [illegible] FOR [illegible] DATE

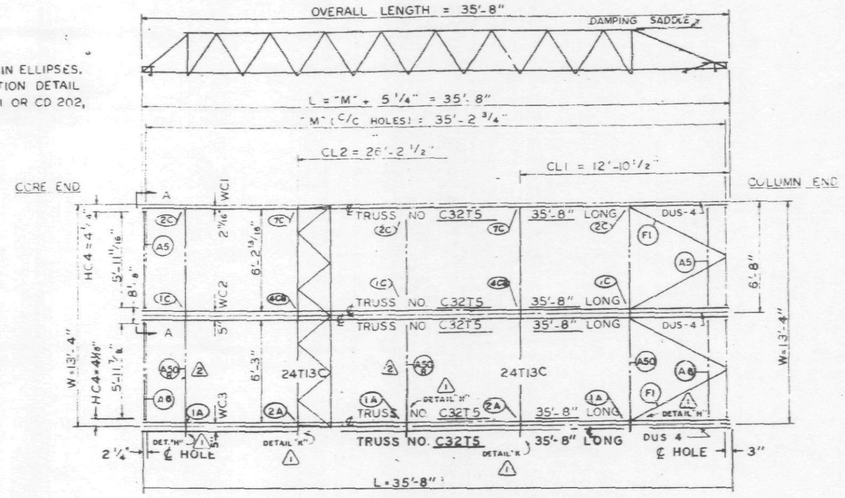
CHECKED BY T.M. CHURA DATE 1-29-69

DETAILED BY [illegible]

FABRICATION CONT. NO. W.T.C. 221

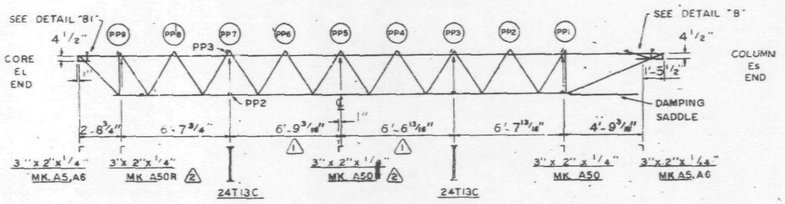
SHEET NO. FP-M1

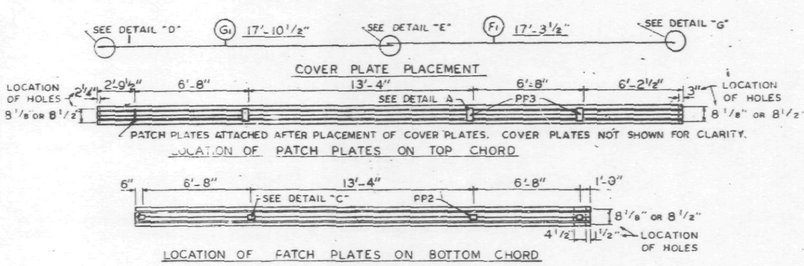
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD 229

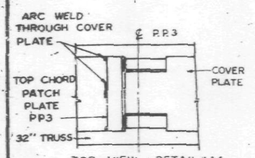


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

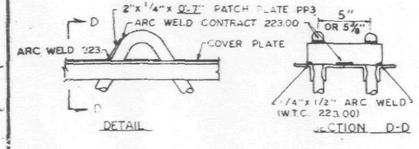
PANEL NO. MR1 SIZE 13'-4" x 35'-8"



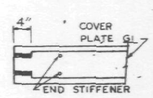




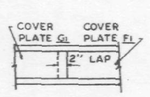
TOP VIEW - DETAIL "A"



DETAIL SECTION D-D

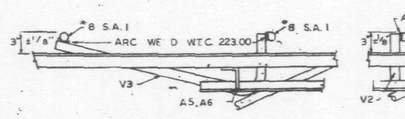


DETAIL "D"

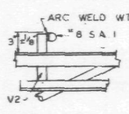


DETAIL "E"

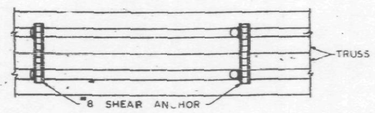
COVER PLATES 29 GA. THICK



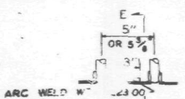
DETAIL "B"



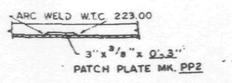
DETAIL "B1"



TOP VIEW - DETAIL "B"

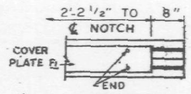


DETAIL "C"



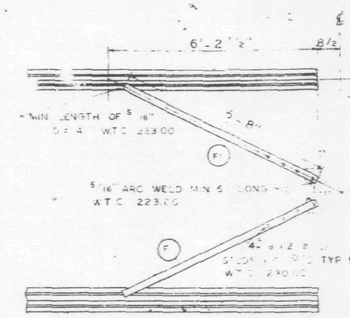
SECTION E-E

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

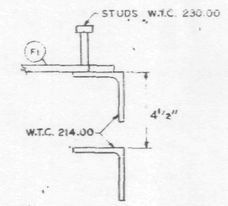


DETAIL "G"

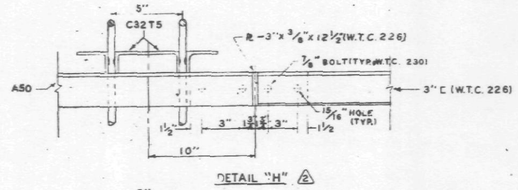
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET
A = 1/4"
B = 1/4"



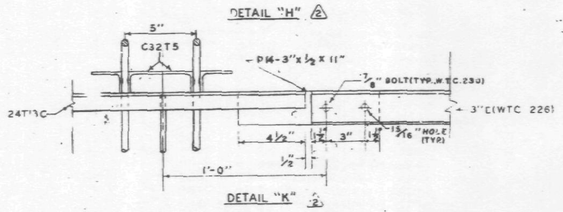
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



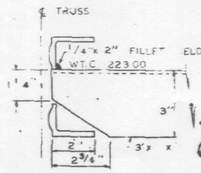
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



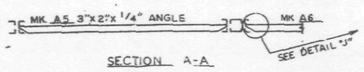
DETAIL "H" (2)



DETAIL "K" (2)



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ES

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1 1/2	ST213C
3"x2"x1/4" ANGLE	(2) A50	1	3"x2"x1/4"x14'-1 1/2"	ST413
	A50R	2		
	A5	2	3"x2"x1/4"x6'-1 13/16"	ST403
	A6	2	3"x2"x1/4"x8'-2"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x5/8"x6'-8"	ST402
PATCH PLATES	PP3	12	2"x1/4"x0'-7"	ST400
	PP2	12	3"x3/8"x0'-3"	ST400
COVER PLATES	G1	3	7"x0.135"x17'-10 1/2"	ST303
	F1	3	7"x0.135"x17'-3 1/2"	ST303
ANGLE CLIPS	C2	8	2 1/2"x1 1/2"x1/4"x6"	ST400
*8 SHEAR ANCHOR	SA1	9	*8 REBAR x 0'-7"	ST400
DAMPING SADDLE	DUS-4	3	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST298
CONNECTION BAR	CB1	2	1" ϕ x 1'-3"	ST400
CONNECTION PLATES	P1	3	3 1/2"x3/8"x0'-6 1/2"	ST400
	P2	2	4 1/2"x.39"x0'-9"	ST400
	P3	2	4 1/2"x.39"x1'-0"	ST400
	P4	2	3"x1 1/2"x0'-11"	ST409

NO.	DATE	REVISION	
(2)	4-16-69	AS NOTED	G.D.C.
(1)	3-11-69	AS NOTED	G.D.C.

REF. DRWG.	
7-AB3-23	7-22-68
7-AB4-3 & 31	1-3-68
7-AB4-15 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2	7-22-68
7-AB4-42	10-15-68

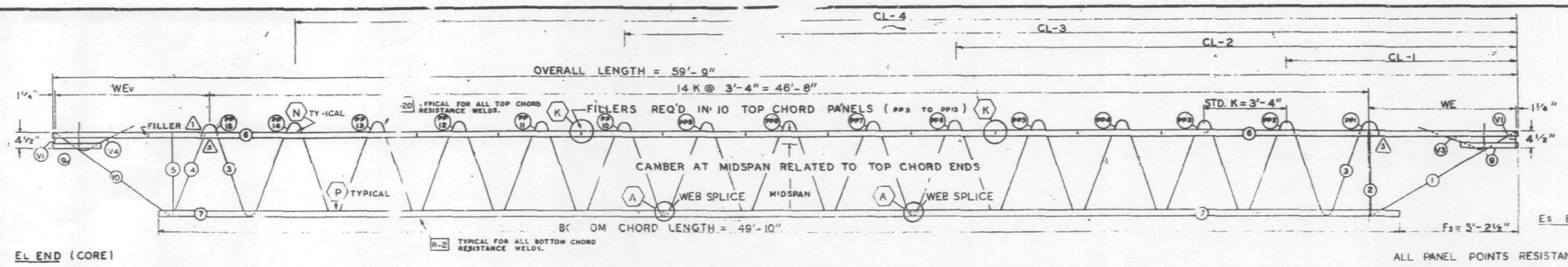
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46-49(EAST), 79-83(WEST)
PANEL MR1 - 13'-4" x 35'-8"
BLDG. B FLOORS 46-49 (NORTH) 79-83 (SOUTH) (2)

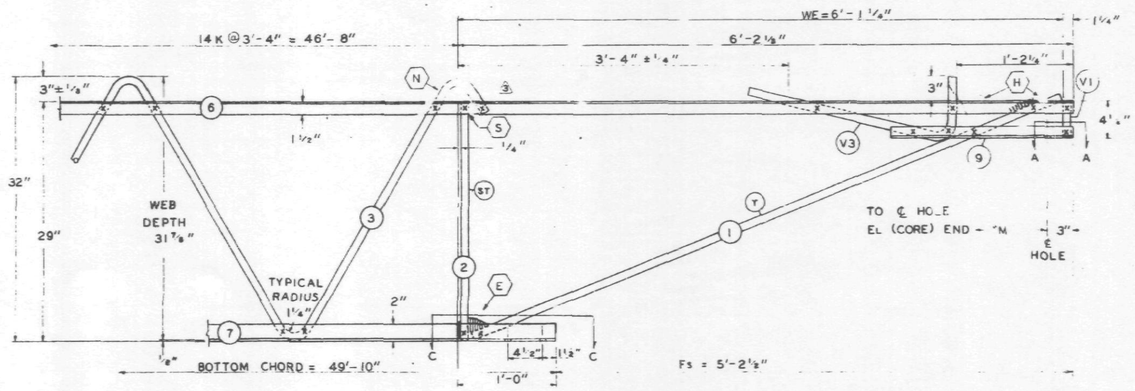
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-23	PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 4/25/69	DRAWN BY K.B. DATE 1-29-69	
APPROVED FOR FABRICATION BY FOR PANYNJ	DATE	CHECKED BY T.M.CHURA DATE 1-29-69	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-MR1

James White

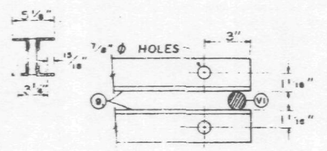


EL END (CORE)

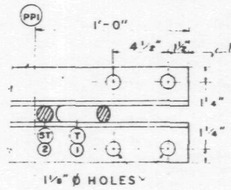


Es END (COLUMN)

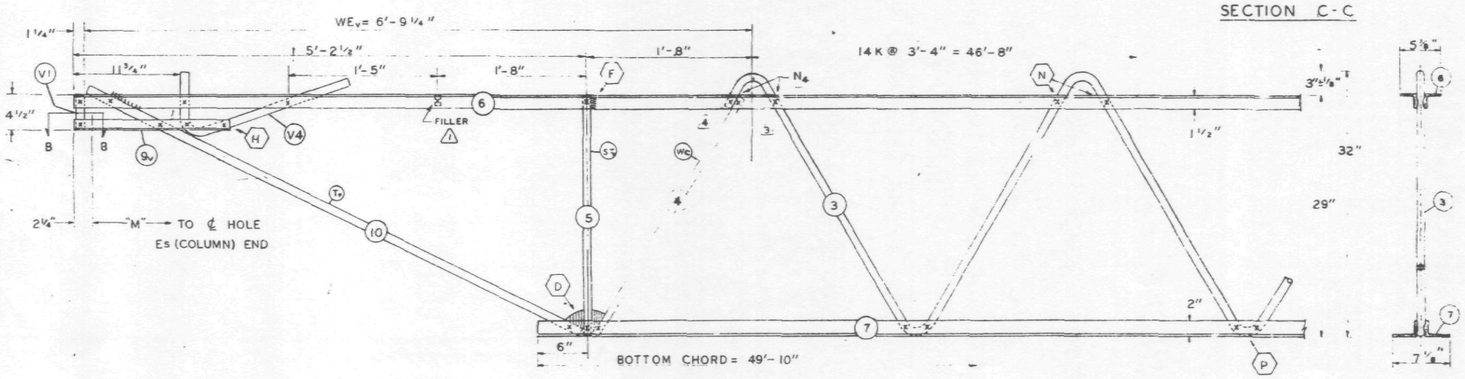
TRUSS ELEVATION



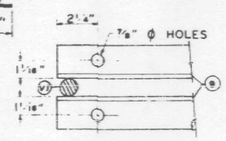
SECTION A-A



SECTION C-C



EL END (CORE)



SECTION B-B

ALL PANEL POINTS RESISTANCE WELDED (x).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (mmm).
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
△1 LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (GOL. END) IN FIELD. ASSEMBLY BY CONTRACT WTC 223.00.

FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN △2	2"	± 3/8"
DESIGN DEPTH	29"	± 1/4"
PANEL "K"	3'-4"	± 1/4"
OVERALL LENGTH	59'-9"	± 3/8"
WEB DEPTH	31 7/8"	± 1/4"

NO.	DATE	REVISION	BY
4	12-6-68	AS NOTED	G.D.C.
△3	10-7-68	AS NOTED	G.D.C.
△2	6-22-68	CAMBER, REF. DRWG. DATE	T.M.C.
△1	3-12-68	FILLER AND WELD DETAIL	J.R.P.

△3 REF. DRWGS.

7-AB1-2	7-22-68
7-AB1-52	2-15-68
7-AB4-50	8-1-68
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67
7-AB1-53 △2	7-22-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER		"M" ℄ HOLES	TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	NO. OF K	NO.	DIA.			
C32TIA-599	6	A242	2"x1 1/2"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	88'-1 1/4"	14 @ 3'-4" = 46'-8" △3	11	1.09	59'-3 3/4"		

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER					
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	MK V1 TYPE STEEL	MK V1 DIA	MK V1 LENGTH	MK V3 TYPE STEEL	MK V3 DIA	MK V3 LENGTH
	C32TIA-599	9	A242	2"x1 1/2"x.25"	1'-10"	6'-1 1/4"	1	A242	1.14	6'-5"	2	A36	1.09	2'-4 7/8" △3	A242	1.14	4 3/8"	A242	1.14	2'-9 1/2"

CORE END

EL END	TRUSS DESIGNATION	BEARING ANGLES				WEv	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER "WC"						WEB "WC"					WEB "WT"				
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	MK V1 TYPE STEEL	MK V1 DIA	MK V1 LENGTH	MK V3 TYPE STEEL	MK V3 DIA	MK V3 LENGTH	MK	TYPE STEEL	PCS	DIA	LENGTH	MK	TYPE STEEL	PCS	DIA	LENGTH
	C32TIA-599	9	A242	2"x1 1/2"x.25"	1'-7"	6'-9 1/4"	10	A242	1.14	5'-6 1/2"	5	A242	1.14	2'-4 7/8"	A242	1.14	4 3/8"	—	—	—	4	A242	1	1.14	2'-10"	—	—	—	—	—

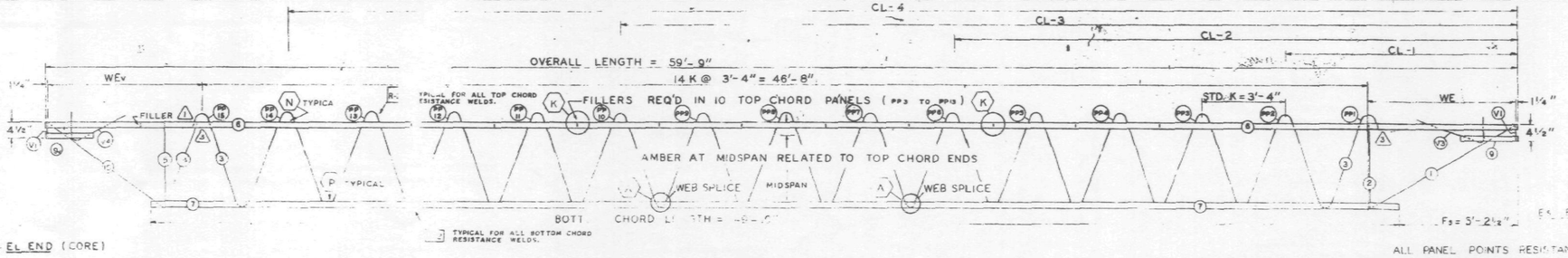
△3 CHECK DIMENSION FOR TRUSS FAB.

LOCATION OF TRANS. TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6 1/2"	22'-10 1/32"	36'-2 1/2"	49'-6 1/2"	5'-2 1/8"

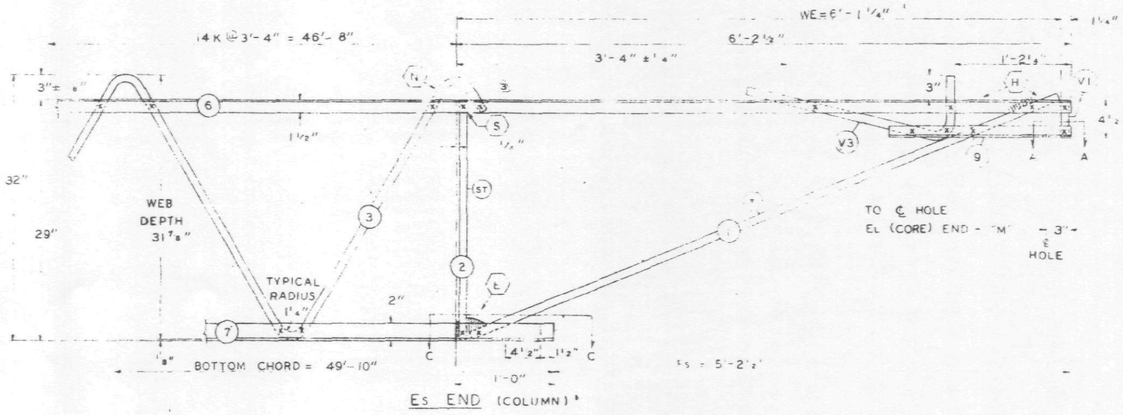
STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIA 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-B

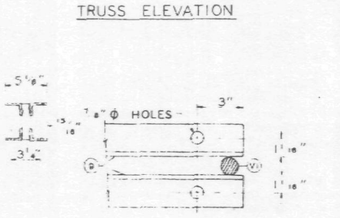
FABRICATION BY: LACLEDE STEEL COMPANY

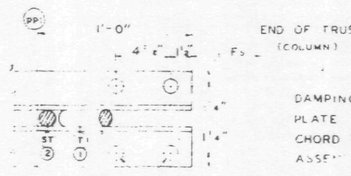
FABRICATED AT: MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB1-2 7-AB3-2	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 12/11/68	DRAWN BY: [illegible] DATE: FEB. 24, 1968	
APPROVED FOR FABRICATION BY: A.C. WEBER FOR FABRICATOR	DATE	CHECKED BY: J.R. PAUL DATE FEB. 24, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. ST201A



FABRICATION REQUIREMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN (2)	2"	± 3/8"
DESIGN DEPTH	29"	± 1 "
PANEL "K"	3'-4"	± 1/4"
OVERALL LENGTH	59'	± 3/8"
WEB DEPTH	31	± 1/4"



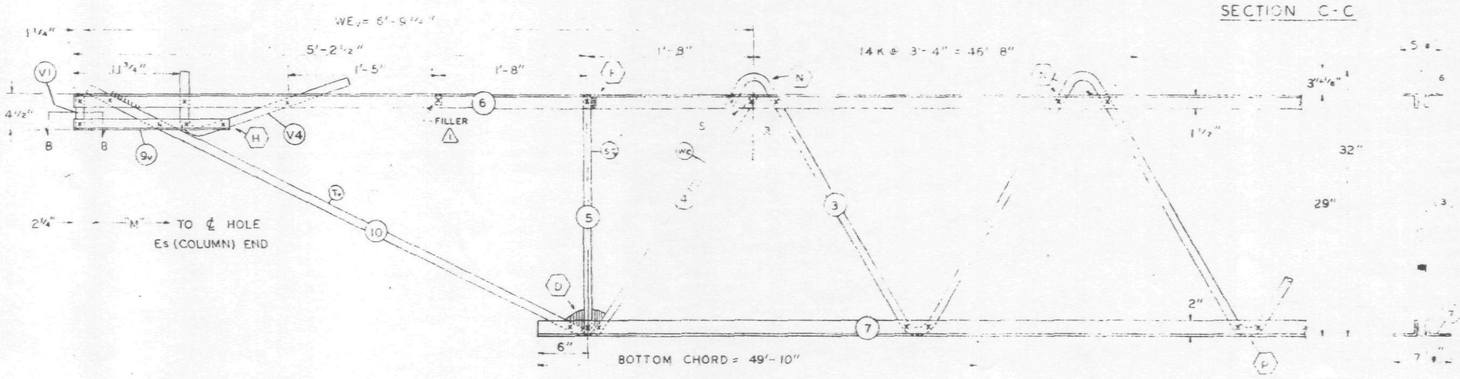


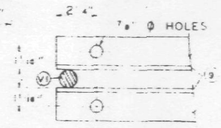


ALL PANEL POINTS RESISTANCE WELDED (××).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (▨).
ALL WELD DETAILS SHOWN ON SHEET ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & V4 DETAIL
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
△ LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STHENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., [V2].

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD ASSEMBLY UNDER CONTRACT W.T.C. 75-4.00.





NO.	DATE	REVISION	BY
3	10-7-68	AS NOTED	S.D.C.
2	5-22-68	CAMBER, REF. DRWG. DATE	T.M.C.
1	3-19-68	FILLER AND WELD DETAIL	J.R.P.

③ REF. DRWGS.

7-AB1-2	7-22-68
7-AB1-52	2-15-68
7-AB4-50	8-1-68
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67
7-AB1-53 (2)	7-22-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER		"M" ℄ HOLES	TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	NO. OF K	NO.	DIA.			
C32TIA-599	6	A242	2"x1¼"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	RP-1¼"	14 @ 3'-4" = 46'-8"	11	1.09	59'-3¾"		

③

	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT			END STIFFENER MK. V1			END STIFFENER MK. V3		
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA	LENGTH	TYPE STEEL	DIA	LENGTH
COLUMN END	C32TIA-599	9	A242	2"x1¼"x.25"	1'-10"	6'-1¼"	1	A242	1.14	6'-5"	2	A36	1.09	2'-4⅞"	A242	1.14	4⅜"	A242	1.14	2'-9½"

③

	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT			STIFFENER MK. V1			STIFFENER MK. V2			STIFFENER MK. V4			WEB "WC"					WEB "WT"				
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	TYPE	L	LENGTH	SIZE	DIA.	LENGTH	MK.	TYPE STEEL	PCS	DIA	LENGTH	MK.	TYPE STEEL	PCS	DIA.	LENGTH
CORE END	C32TIA-599	9	A242	2"x1¾"x.25"	1'-7"	6'-9½"	10	A242	1.14	5'-6½"	5	A242	1.14	2'-4⅞"	A242	1.14	4⅜"	—	—	—	A242	1.14	2'-2½"	4	A242	1	1.14	2'-10"	—	—	—	—	—

③

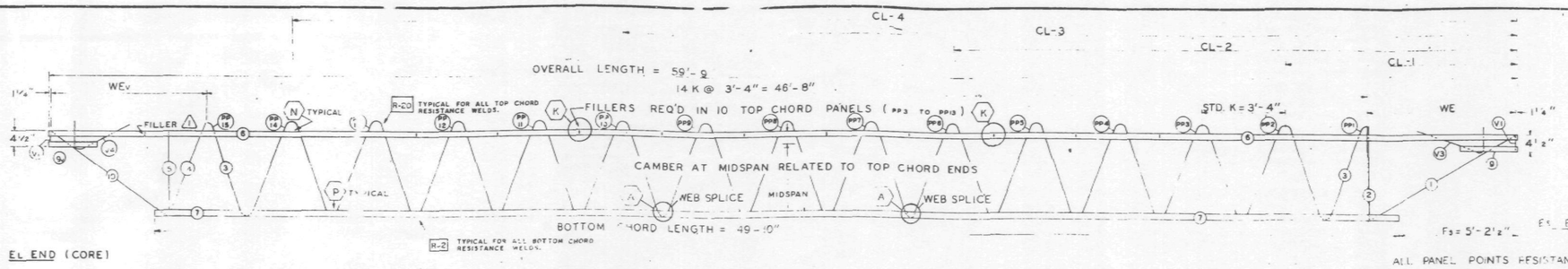
CHECK DIMENSION FOR TRUSS FAB

LOCATION OF TRANS. TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6½"	22'-10½"	36'-2½"	49'-6½"	5'-2½"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER · N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIA 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB1-2 7-AB3-2	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 10/14/68	DRAWN BY: [illegible] DATE: FEB. 24, 1968	
APPROVED FOR FABRICATION BY A.C. WEBER FOR FABRICATOR	DATE	CHECKED BY J.B. PAUL DATE: FEB. 24, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. ST201A

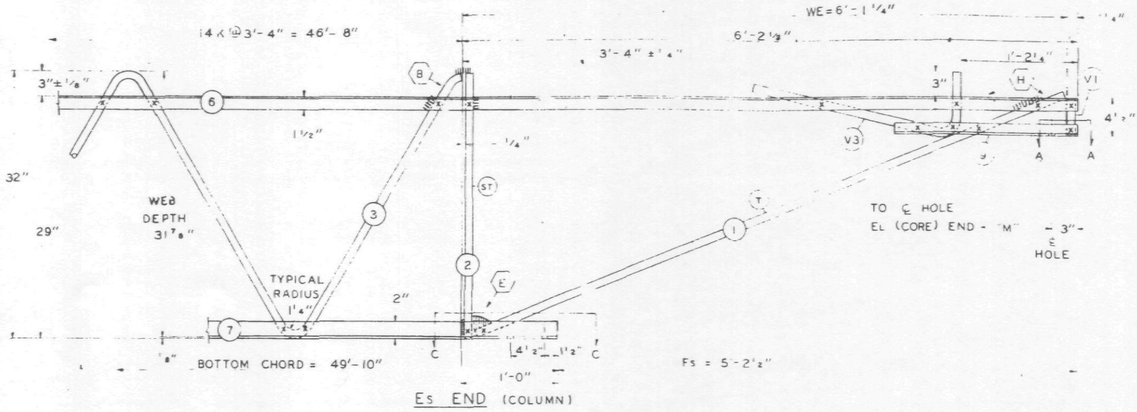


EL END (CORE)

FABRICATION REQUIRMENTS			
		DESIGN	TOLERANCE
CAMBER AT MIDSPAN	2	2"	± 3/8"
DESIGN DEPTH		- "	± 1/4"
PANEL "K"		3'-4"	± 1/4"
OVERALL LENGTH		59'-9"	± 3/8"
WEB DEPTH		31 7/8"	± 1/4"

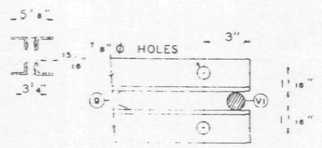
ALL PANEL POINTS RESISTANCE WELD 'R' ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES ONLY. ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

SEE SHEET ST295 FOR VI, V3, & 4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.

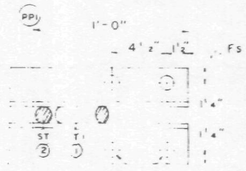


Es END (COLUMN)

TRUSS ELEVATION

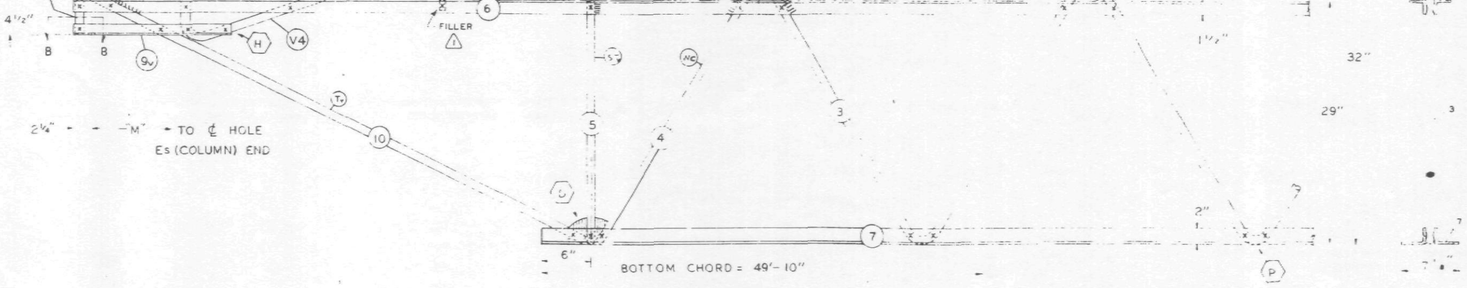


SECTION A-A

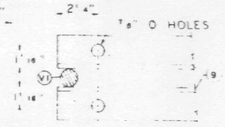


SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD ASSEMBLY BY CONTRACT WTC 223.00.



EL END (CORE)



SECTION B-B

NO.	DATE	REVISION	BY
2	6-22-68	CAMBER, REF. DRWG. DATE	T.M.C.
1	3-19-68	FILLER AND WELD DETAIL	J.R.P.

REF. DRWGS.

7-AB1-2	2-15-68
7-AB1-52	2-15-68
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67
7-AB1-53 (2)	4-1-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"				FILLER		"M" ℄ HOLES	TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH NO OF K	NO.	DIA.			
C32TIA-599	6	A242	2"x1 1/2"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	87'-2 1/2" 14 @ 3'-4" = 46'-8"	11	1.04	59'-3 3/4"		

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER MK. VI				MK. V3		
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH
	C32TIA-599	9	A242	2"x1 1/2"x.25"	1'-10"	6'-1 1/4"	1	A242	1.4	6'-5"	2	A36	1.09	2'-7 7/8"	A242	1.14	4 3/8"	A242	1.14	2'-9 1/2"

CORE END

EL END	TRUSS DESIGNATION	BEARING ANGLES				WEv	DIAGONAL "Tv" STRUT				VERTICAL "STv" STRUT				END STIFFENER MK. VI			MK. V2			MK. V4			WEB "Wc"				WEB "Wt"				
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	PCS.	DIA.	LENGTH	MK.	TYPE STEEL	PCS.	DIA.	LENGTH
	C32TIA-599	9	A242	2"x1 1/2"x.25"	1'-7"	6'-9 1/4"	10	A242	1.14	5'-6 1/2"	5	A242	1.14	2'-4 3/4"	A242	1.14	4 3/4"	—	—	—	A242	1.14	2'-2 1/2"	4	A242	1	1.14	3'-0 1/2"	—	—	—	—	—

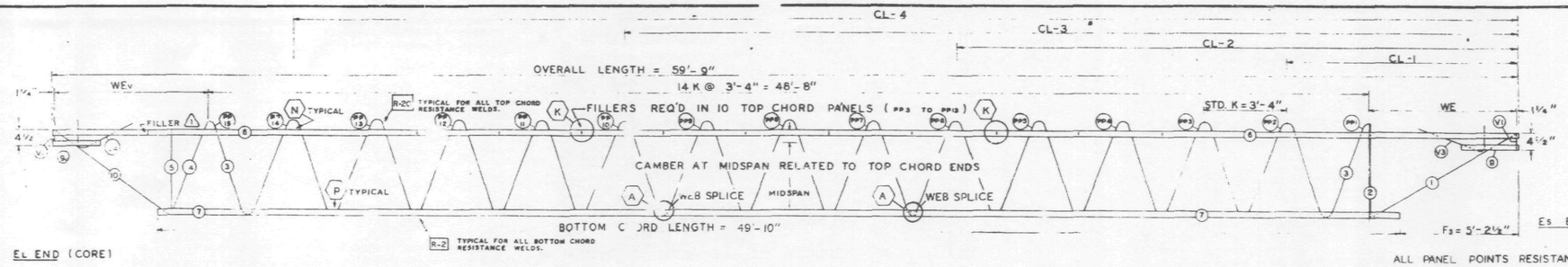
CHECK DIMENSION FOR TRUSS FAB

LOCATION OF TRANS TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6 1/2"	22'-10 1/2"	36'-2 1/2"	49'-6 1/2"	5'-2 1/2"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIA 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB1-2 7-AB3-2 PLATE
APPROVED FOR FABRICATION BY JW FOR PONYA — DATE 6/25/68	DRAWN BY: DATE: FEB. 24, 1968
APPROVED FOR FABRICATION BY A.C. WEBER FOR FABRICATOR — DATE	CHECKED BY J.R. PAUL DATE FEB. 24, 1968 — IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER	FABRICATION CONT. NO. WTC 221 — SHEET NO. ST201A



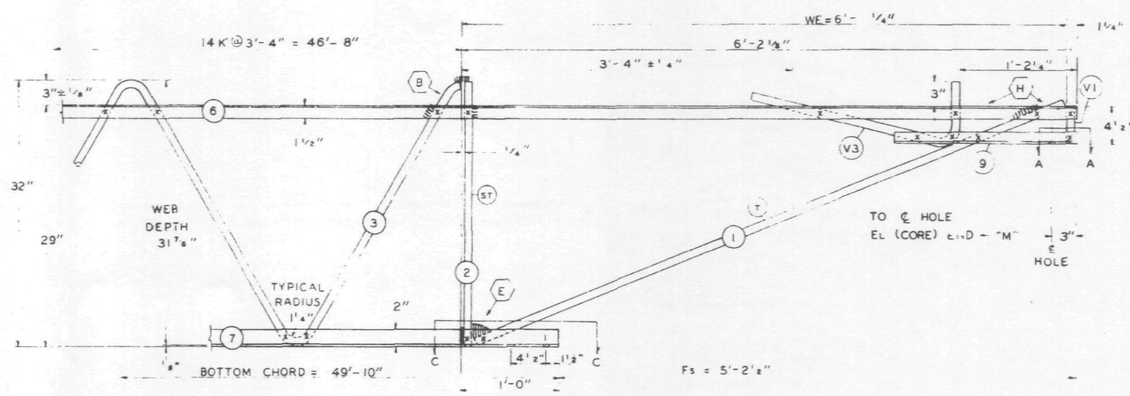
EL END (CORE)

Es END (COLUMN)

FABRICATION REQUIRMENTS.		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN	1"	± 3/8"
DESIGN DEPTH	2'	± 1/4"
PANEL "K"	3'-4"	± 1/4"
OVERALL LENGTH	59'-9"	± 3/8"
WEB DEPTH	31 7/8"	1/4"

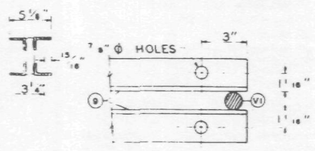
ALL PANEL POINTS RESISTANCE WELDED (x).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (mmm).
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
⚠1 LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.

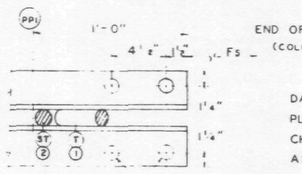


Es END (COLUMN)

TRUSS ELEVATION

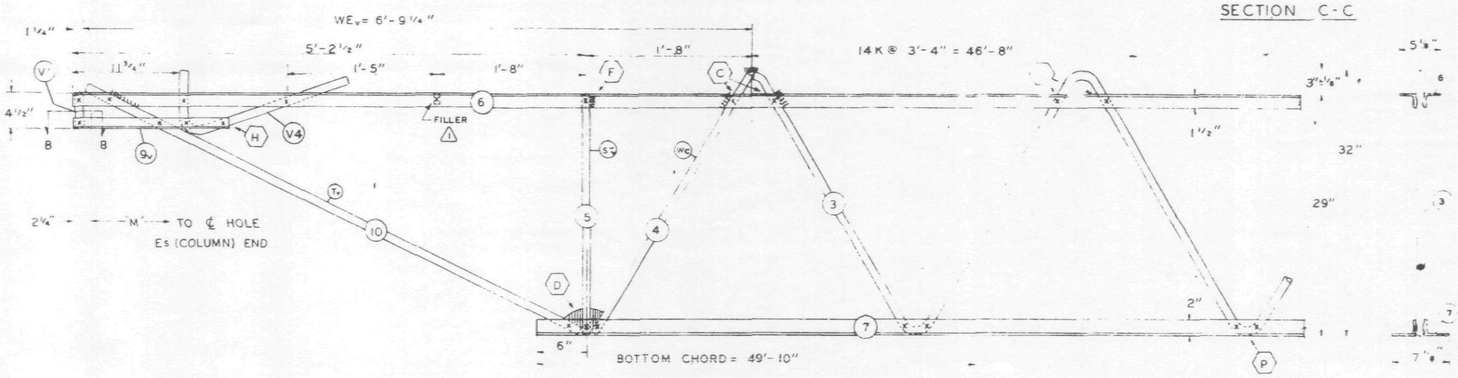


SECTION A-A

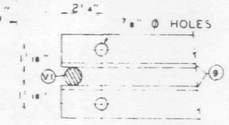


SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL. END) IN FIELD. ASSEMBLY BY CONTRACT WTC 22300.



EL END (CORE)



SECTION B-B

NO.	DATE	REVISION	BY
⚠1	3-19-68	FILLER AND WELD DETAIL	J.R.P.

REF. DRWGS.

7-AB1-2	2-15-68
7-AB1-52	2-15-68
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67
7-AB1-53	1-3-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER		℄ "M" ℄ HOLES	TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	NO. OF K	NO	DIA.			
C32TIA-599	6	A242	2"x1½"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	87'-2½"	14 @ 3'-4" = 46'-8"	11	1.09	59'-3¾"		

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER					
		MK	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	MK. V1 TYPE STEEL	MK. V1 DIA	MK. V1 LENGTH	MK. V3 TYPE STEEL	MK. V3 LENGTH	
	C32TIA-599	9	A242	2"x1½"x.25"	1'-10"	6'-1'-4"	1	A242	1.14	6'-5"	2	A36	1.09	2'-7⅞"	A242	1.14	4⅜"	A242		

CORE END

EL END	TRUSS DESIGNATION	BEARING ANGLES				WEv	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				VD STIFFENER								WEB "WC"					WEB "WT"				
															MK. V1			MK. V2			MK. V4											
		MK	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	PCS	DIA.	LENGTH	MK.	TYPE STEEL	PCS	DIA.	LENGTH
	C32TIA-599	9	A242	2"x1½"x.25"	1'-7"	6'-9¼"	10	A242	1.14	5'-6½"	5	A242	1.14	2'-4¾"	A242	1.14	4⅜"	—	—	—	A242	1.14	2'-2½"	4	A242	1	1.14	3'-0½"	—	—	—	—	—

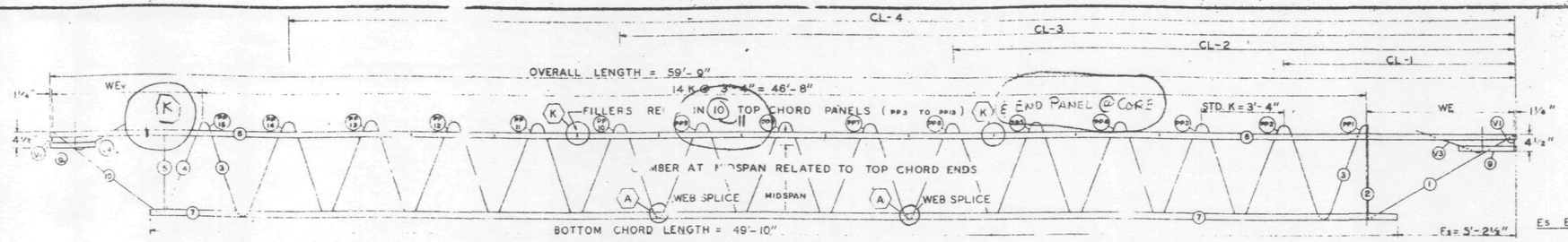
CHECK DIMENSION FOR TRUSS FAB

LOCATION OF TRANS. TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6½"	22'-10½"	36'-2½"	49'-6½"	5'-2½"

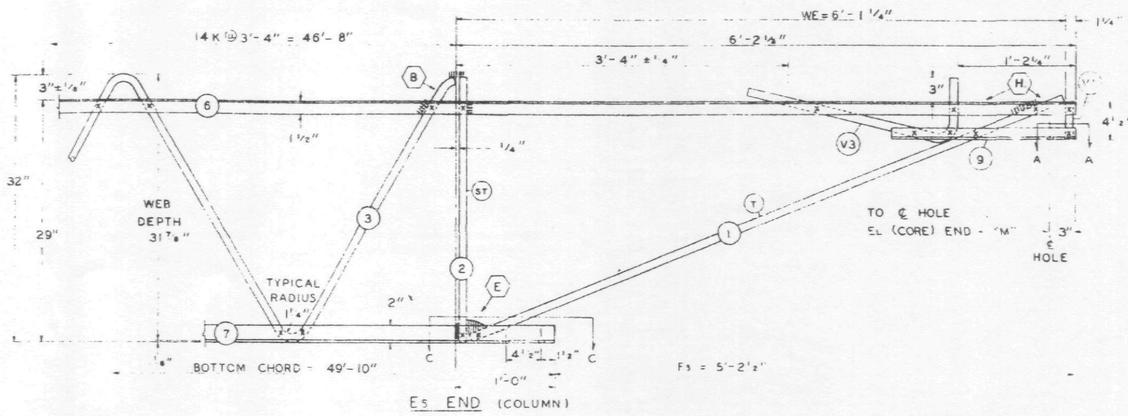
STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIA 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB1-2 7-AB3-2 PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE 3/26/68
DRAWN BY: L.R. DATE: FEB. 24, 1968
APPROVED FOR FABRICATION BY A.C. WEBER FOR FABRICATOR DATE
CHECKED BY: J.R. PAUL DATE: FEB. 24, 1968
IN CHARGE OF PROD. E.E.V.
DETAILED BY: A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. ST201A

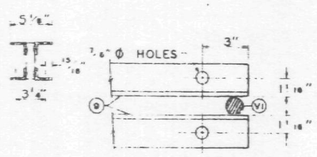


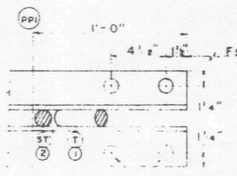
EL END (CORE)



Es END (COLUMN)

TRUSS ELEVATION

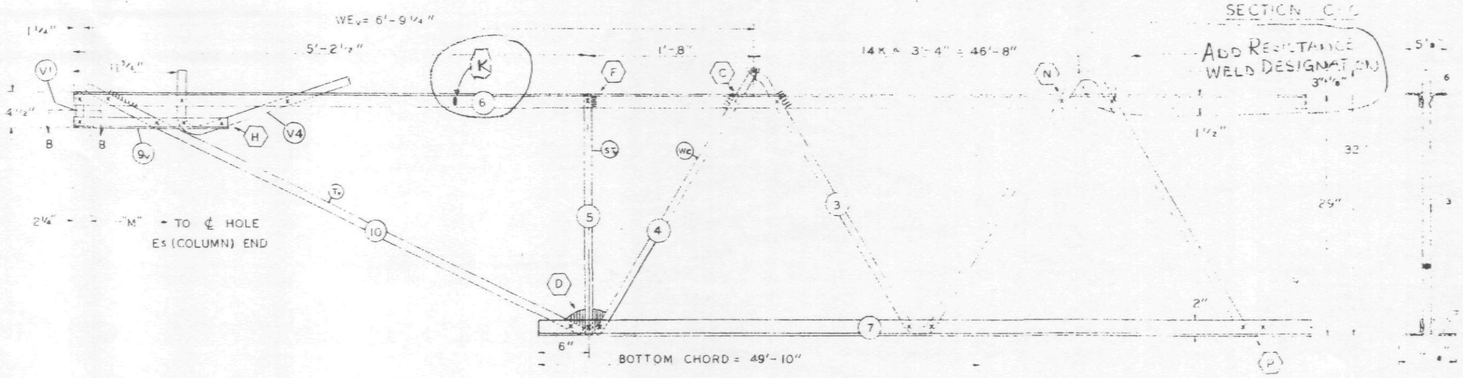




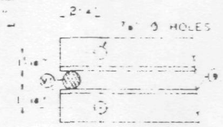
DAMPING DEVICE CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD. ASSEMBLY BY CONTRACT WTC 223.00.

ALL PANEL POINTS RESISTANCE WELDED (x).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (PREQ).
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.
BOXED IN LETTERS INDICATE WELD DETAIL, i.e. (A).

FABRICATION REQUIREMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN	1"	± ¼"
DESIGN DEPTH	29"	± 1/4"
PANEL "K"	3'-4"	± 1/16"
OVERALL LENGTH	59'-9"	± 3/8"
WEB DEPTH	31 7/8"	± 1/4



EL END (CORE)



REF. DRWGS.

7-AB1-2	2-15-68
7-AB1-52 & 53	1-3-68
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER		"M" C to C HOLES	TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	NO. OF K	NO.	DIA.			
C32TIA-599	6	A242	2"x1½"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	87'-2½"	14 @ 3'-4" = 46'-8"	10 11	1.09	59'-3¾"		

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER							
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	MK V1 TYPE STEEL	MK V1 DIA	MK V1 LENGTH	MK V3 TYPE STEEL	MK V3 DIA	MK V3 LENG
	C32TIA-599	9	A242	2"x1½"x.25"	1'-10"	6'-1¼"	1	A242	1.14	6'-5"	2	A36	1.09	2'-7⅞"	A242	1.14	4⅜"	A242	1.14	2'-9½"

CHECK DIMENSION FOR TRUSS FAB.

LOCATION OF TRANS. TRUSS					
CL-1	CL-2	CL-3	CL-4	Fs	
9'-6½"	22'-10½"	36'-2½"	49'-8½"	5'-2½"	

CORE END

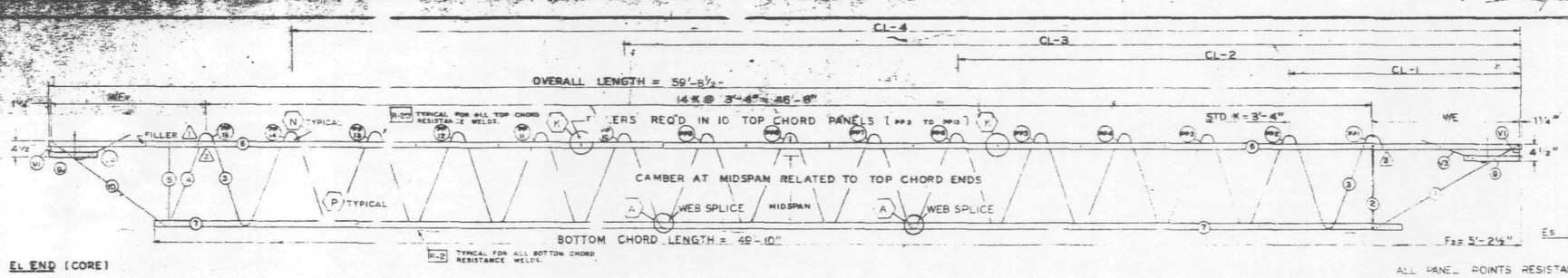
EL END	TRUSS DESIGNATION	BEARING ANGLES				WEv	DIAGONAL "Tv" STRUT				VERTICAL "ST" STRUT				END STIFFENER								WEB "Wc"				WEB "WT"			
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	MK V1 TYPE STEEL	MK V1 DIA	MK V1 LENGTH	MK V2 TYPE STEEL	MK V2 DIA	MK V2 LENGTH	MK V4 TYPE STEEL	MK V4 DIA	MK V4 LENGTH	MK	TYPE STEEL	PCS.	DIA.	LENGTH	MK	TYPE STEEL	PCS.	DIA.	LENGTH
	C32TIA-599	9v	A242	2"x1½"x.25"	1'-7"	6'-9¼"	10	A242	1.14	5'-6½"	5	A242	1.14	2'-4¾"	A242	1.14	4⅜"	—	—	—	A242	1.14	2'-2½"	4	A242	1	1.14	3'-0½"	—	—	—	—	—

SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
1-3-68 SK

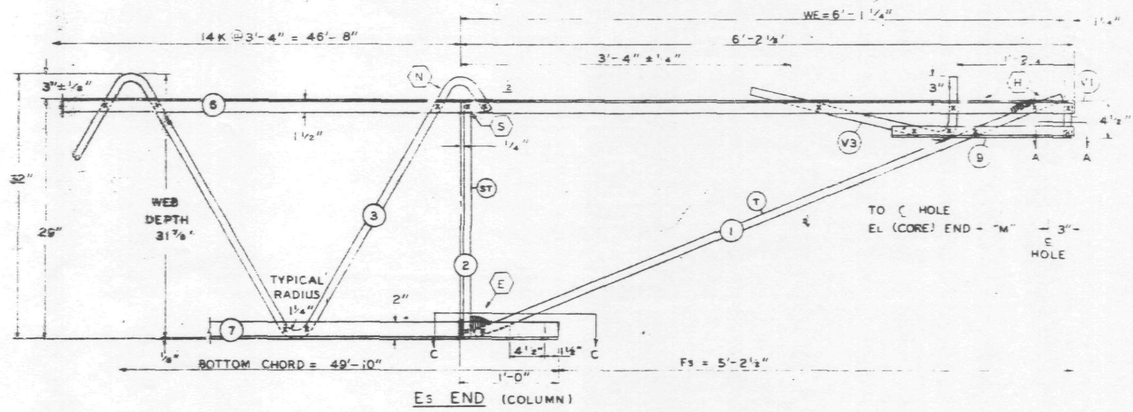
STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIA 59'-9" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB1-2 7-AB3-2	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY: [illegible] DATE: FEB. 24, 1968	
APPROVED FOR FABRICATION BY A.C. WEBER FOR FABRICATOR	DATE	CHECKED BY: J.R. PAUL DATE FEB. 24, 1968	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. ST201A

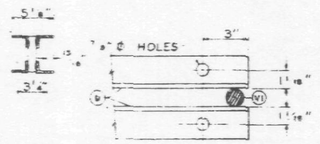


EL END (CORE)

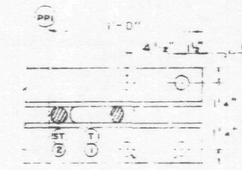


Es END (COLUMN)

TRUSS ELEVATION



SECTION A-A



SECTION C-C

ALL PANEL POINTS RESISTANCE WELDED (R).
ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (ARC).
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2 .

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD ASSEMBLY BY CONTRACT WTC 223.00.

FABRICATION		
DESIGN DEPTH	32"	32"
PANEL "K"	3'-4"	3'-4"
OVERALL LENGTH	59'-8½"	59'-8½"
WEB DEPTH	31⅞"	31⅞"

NO.	DATE	REVISION
2	12-11-69	AS NOTED
1	3-19-68	FILLER AND WELD DETAIL

2 REF. DRWGS.

7-AB1-2	7-22-68
7-AB1-52	2-15-68
7-AB4-50	8-1-68
7-AB3-2	5-3-68
7-AB4-50.5	10-20-67
7-AB1-53	7-23-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"				FILLER	℄ "M" ℄ HOLES		TRUSS DATA
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	NO OF K	NO	DIA		
C32TIB-598.5	6	A242	2"x1⅛"x.25"	59'-8½"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	88'-1¼"	14 @ 3'-4" = 46'-8"	11	1.09	59'-3 ¼"	

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER					
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	MK. V1 TYPE STEEL	MK. V1 DIA	MK. V1 LENG'	MK. V3 TE	MK. V3 DIA	MK. V3 LENGTH
	C32TIB-598.5	9	A242	2"x1¼"x.25"	1'-10"	6'-1¼"	1	A242	L14	6'-5"	2	A36	1.09	2'-4⅞"	A242	L14	4⅜"	A-		2'-9½"

CORE END

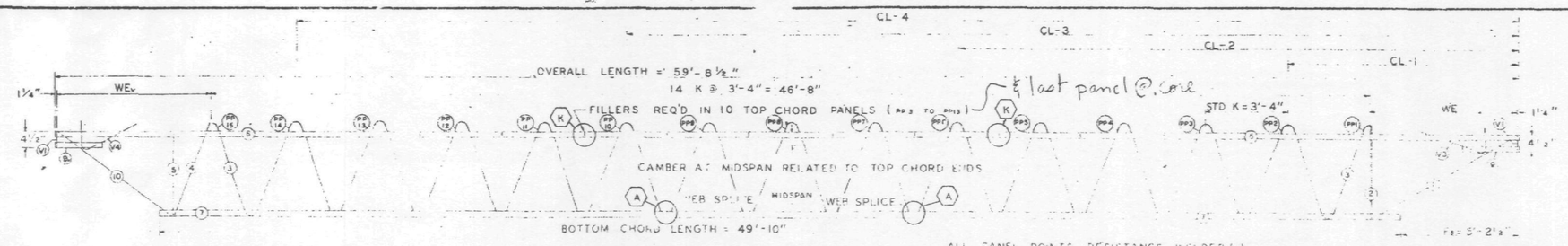
EL END	TRUSS DESIGNATION	BEARING ANGLES				WE$_V$	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER								WEB "WC"					WEB "WT"				
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	MK. V1 TYPE STEEL	MK. V1 DIA	MK. V1 LENGTH	MK. V2 TYPE STEEL	MK. V2 DIA	MK. V2 LENGTH	MK. V4 TYPE STEEL	MK. V4 DIA	MK. V4 LENGTH	MK.	TYPE STEEL	PCS	DIA	LENGTH	MK.	TYPE STEEL	PCS	DIA	LENGTH
	C32TIB-598.5	9	A242	2"x1½"x.25"	1'-5"	6'-8¾"	10	A242	L14	5'-6⅛"	5	A242	L14	2'-4⅞"	A242	L14	4½"	—	—	—	A242	L14	2'-2½"	4	A242	1	L14	5'-10"	—	—	—	—	—

CHECK DIMENSION FOR TRUSS FAB LOCATION OF TRANS. TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6 ⅛"	22'-10 ⅛"	36'-2 ⅛"	49'-6 ⅛"	5'-2 ½"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIB 59'-8½" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT: MADISON, ILLINOIS
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A. DATE: 4-26-68
APPROVED FOR FABRICATION BY: ____ FOR FABRICATOR DATE: ____
DETAILED BY: LACLEDE STEEL CO.

DESIGN DRAWING NO. 7-AB1-2 7-AB4-2 PLATE
DRAWN BY: [illegible] DATE: FEB 26, 1968
CHECKED BY: [illegible] DATE: FEB 26, 1968
FABRICATION CONT. NO. W.T.C. 221



EL END (CORE)

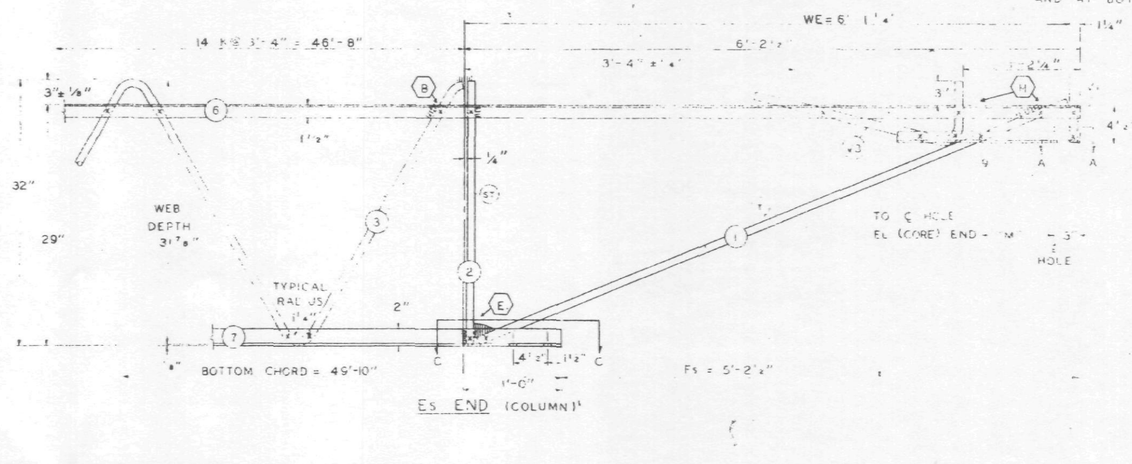
TRUSS ELEVATION

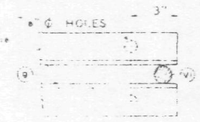
ES END (COLUMN)

FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN	1"	± 5/8"
DESIGN DEPTH	29"	± 1/4"
PANEL "K"	3'-	± 1/4"
OVERALL LENGTH	59'-½"	± 3/8
WEB DEPTH	31 7/8"	± 1/4

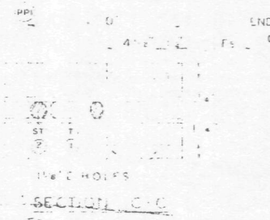
ALL PANEL POINTS RESISTANCE WELDED (x).
ARC WELDS INDICATED AT SHADED AREAS
AND AT BOTTOM CHORD WEB SPLICES (###).

ALL WELD DETAILS SHOWN ON SHEETS ST290
AND ST291.
BOXED IN LETTERS INDICATE WELD DETAIL (e.g. (A))



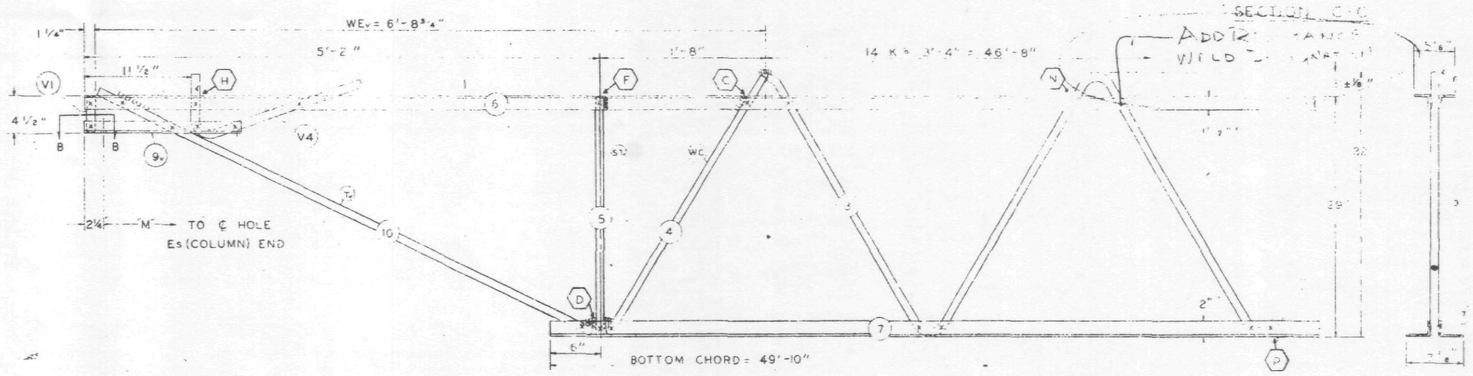


SECTION A-A

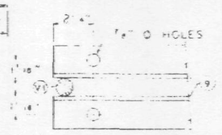


SECTION C-C

DAMPING UNIT INJECTION
PLATE ATTACHED TO BOTTOM
CHORD SECTION END IN FIELD
ASSEMBLY BY CONTRACT WTC 22300.



EL END (CORE)



SECTION B-B

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"				FILLER		"M" ℄ HOLES	TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	CHORD SIZE	LENGTH	MK	TYPE STEEL	DIA	LENGTH	NO OF K	NO	DIA		
C32T1B-598.5	6	A242	2"x1½"x.25	59'-8½"	7	A36	3"x2"x.37	49'-10"	3	A36	1.09	87'-2½"	14 @ 3'-4" = 46'-8"	10	1.09	59'-3¼"	

COLUMN END

ES END TRUSS DESIGNATION	BEARING ANGLES MK.	TYPE STEEL	CHORD SIZE	LENGTH	WE	DIAGONAL "T" STRUT MK.	TYPE STEEL	DIA	LENGTH	VERTICAL "ST" STRUT MK.	TYPE STEEL	DIA	LENGTH	END STIFFENER MK VI TYPE STEEL	DIA	LENGTH	MK V3 TYPE STEEL	DIA	LENGTH
C32T1B-598.5	9	A242	2"x1½"x.25	1'-10"	6'-1¼"	1	A242	1.14	6'-5"	2	A36	1.09	2'-7⅝"	A242	1.14	4⅜"	A		1A) 2'-9½"

CORE END

EL END TRUSS DESIGNATION	BEARING ANGLES MK.	TYPE STEEL	CHORD SIZE	LENGTH	WEv	DIAGONAL "Tv" STRUT MK.	TYPE STEEL	DIA	LENGTH	VERTICAL "STv" STRUT MK.	TYPE STEEL	DIA	LENGTH	END STIFFENER MK VI TYPE STEEL	DIA	LENGTH	MK V2 TYPE STEEL	DIA	LENGTH	MK V4 TYPE STEEL	DIA	LENGTH	WEB "WC" MK.	TYPE STEEL	PCS	DIA	LENGTH	WEB "WT" MK.	TYPE STEEL	PCS	DIA	LENGTH
C32T1B-598.5	9	A242	2"x1½"x.25	1'-6"	6'-8¾"	10	A242	1.14	5'-6⅛"	5	A242	1.14	2'-4¾"	A242	1.14	4⅜"	—	—	—	A242	1.14	2'-2½"	4	A242	1	1.14	3'-0½"	—	—	—	—	—

CHECK DIMENSION FOR TRUSS FAB LOCATION OF TRANS TRUSS

CL-1	CL-2	CL-3	CL-4	Fs
9'-6½"	22'-10½"	36'-2½"	49'-6½"	5'-2½"

REF DRWGS.

* 7-AB1-2	2-15-68
7-AB1-52	2-15-68
7-AB1-53	1-3-68
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67

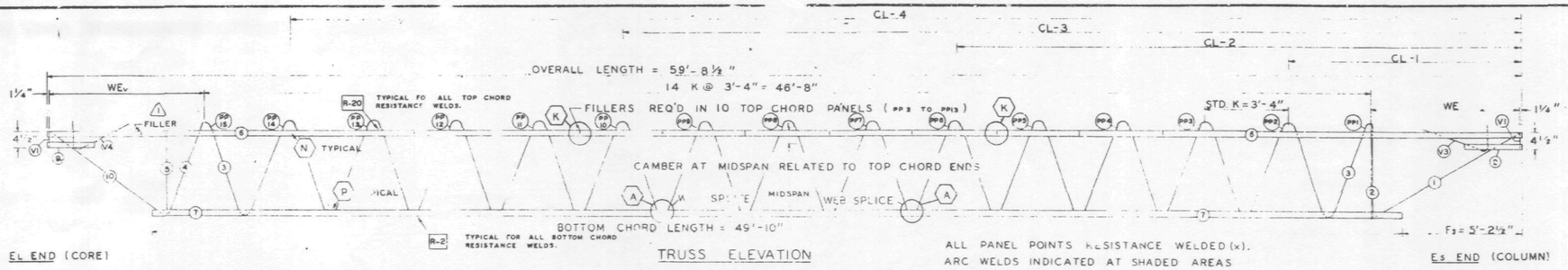
PAINT
LACLEDE ELECTROCOAT
RED NO 10001

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR TRUSS C32T1B 59'-8½" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB1-2 7-AB3-2 PLATE
APPROVED FOR FABRICATION BY ___ FOR P.O.N.Y.A. DATE
DRAWN BY L.R DATE: FEB. 26, 1968
APPROVED FOR FABRICATION BY ___ FOR FABRICATOR DATE
CHECKED BY J.R. PAUL DATE FEB. 26, 1968
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO ST201B



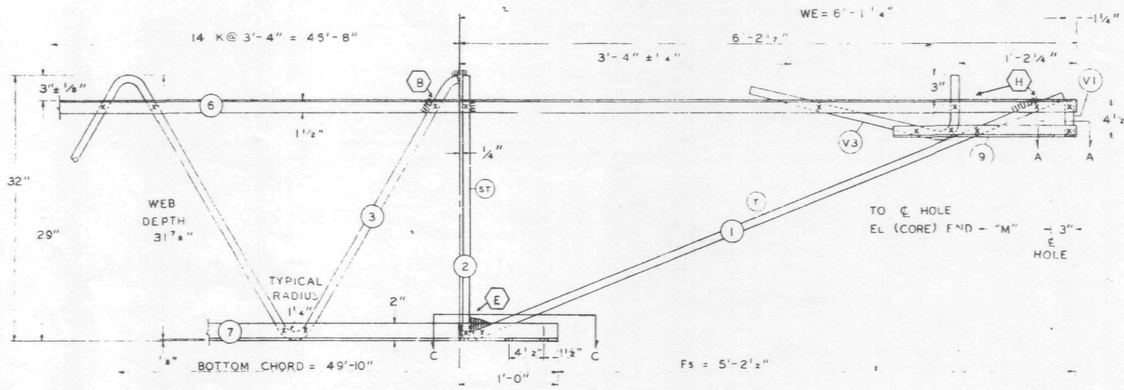
EL END (CORE)

TRUSS ELEVATION

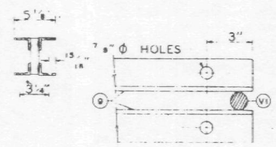
Es END (COLUMN)

ALL PANEL POINTS RESISTANCE WELDED (x).
ARC WELDS INDICATED AT SHADED AREAS
AND AT BOTTOM CHORD WEB SPLICES (IIIIII).

FABRICATION REQUIRMENTS		
	DESIGN	TOLERANCE
CAMBER AT MIDSPAN	1"	± 3/8"
DESIGN DEPTH	29"	± 1/4"
PANEL "K"	3'-4"	± 1/4"
OVERALL LENGTH	59'-8½"	± 3/8"
WEB DEPTH	31 7/8"	± 1/4"



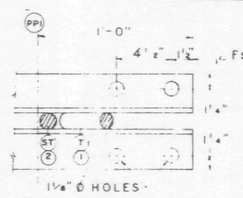
Es END (COLUMN)



SECTION A-A

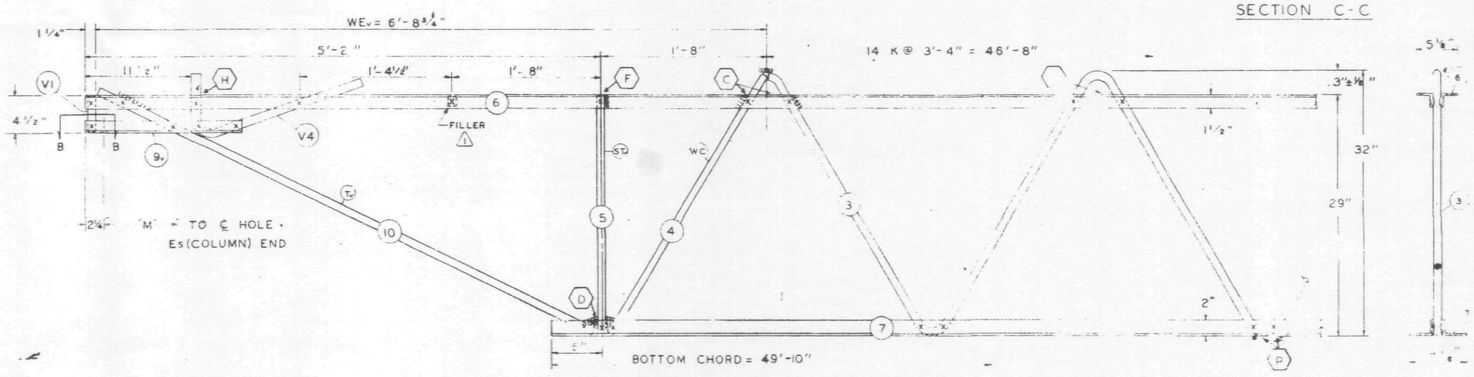
ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

⚠1 SEE SHEET ST295 FOR V1, V3, & V4 DETAILS.
LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A).
LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., R-2.

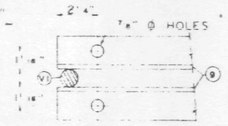


SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD (COL END) IN FIELD. ASSEMBLY BY CONTRACT WTC 223.00



EL END (CORE)



SECTION B-B

NO.	DATE	REVISION	BY
⚠	3-19-68	FILLER AND WELD DETAIL.	J.R.P.

REF DRWGS.

7-AB1-2	2-15-68
7-AB1-52	2-15-68
7-AB1-53	1-3-68
7-AB4-50 & 50.2	10-20-67
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67

PAINT

LACLEDE ELECTROCOAT
RED NO 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER		℄ "M" HOLES
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA	LENGTH	NO OF K	NO	DIA	
C32T1B-59B5	6	A242	2"x1½"x.23	59'-8½"	7	A36	3"x2"x.37	49'-10"	3	A36	1.09	87'-2½"	14 @ 3'-4" = 46'-8"	1	1.09	59'-3¼"

TRUSS DATA

COLUMN END

Es END TRUSS DESIGNATION	BEARING ANGLES MK.	BEARING ANGLES TYPE STEEL	BEARING ANGLES CHORD SIZE	BEARING ANGLES LENGTH	WE	DIAGONAL "T" STRUT MK.	DIAGONAL "T" STRUT TYPE STEEL	DIAGONAL "T" STRUT DIA	DIAGONAL "T" STRUT LENGTH	VERTICAL "ST" STRUT MK.	VERTICAL "ST" STRUT TYPE STEEL	VERTICAL "ST" STRUT DIA	VERTICAL "ST" STRUT LENGTH	END STIFFENER MK. V1 TYPE STEEL	END STIFFENER MK. V1 DIA	END STIFFENER MK. V1 LENGTH	END STIFFENER MK. V3 LENGTH
C32T1B-59B5	9	A242	2"x1½"x.25	1'-10"	6'-1¼"	1	A242	1¼	5'-5"	2	A36	1	2'-7¾"	A242	1¼	4'-8"	A242

CORE END

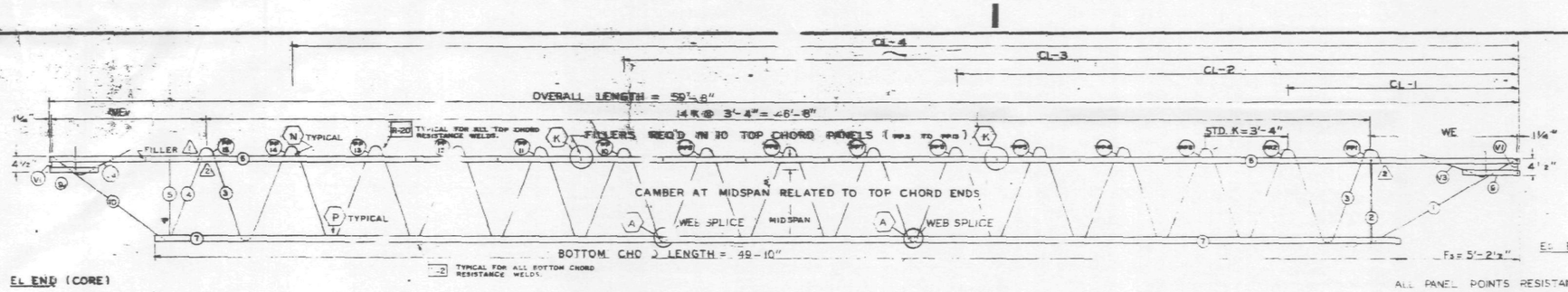
EL END TRUSS DESIGNATION	BEARING ANGLES MK.	BEARING ANGLES TYPE STEEL	BEARING ANGLES CHORD SIZE	BEARING ANGLES LENGTH	WE.	DIAGONAL "T" STRUT MK.	DIAGONAL "T" STRUT TYPE STEEL	DIAGONAL "T" STRUT DIA	DIAGONAL "T" STRUT LENGTH	VERTICAL "ST" STRUT MK.	VERTICAL "ST" STRUT TYPE	VERTICAL "ST" STRUT DIA	VERTICAL "ST" STRUT LENGTH	END STIFFENER MK. V4 TYPE	END STIFFENER MK. V4 DIA	END STIFFENER MK. V4 LENGTH	END STIFFENER MK. V3 LENGTH
C32T1B-59B5	9	A242	2"x1½"x.25	1'-10"	6'-1¼"	1	A242	1¼	5'-5"	2	A36	1	2'-7¾"	A242	1¼	4'-8"	A242

CHECK DIMENSION FOR TRUSS FAB
LOCATION OF TRANS TRUSS

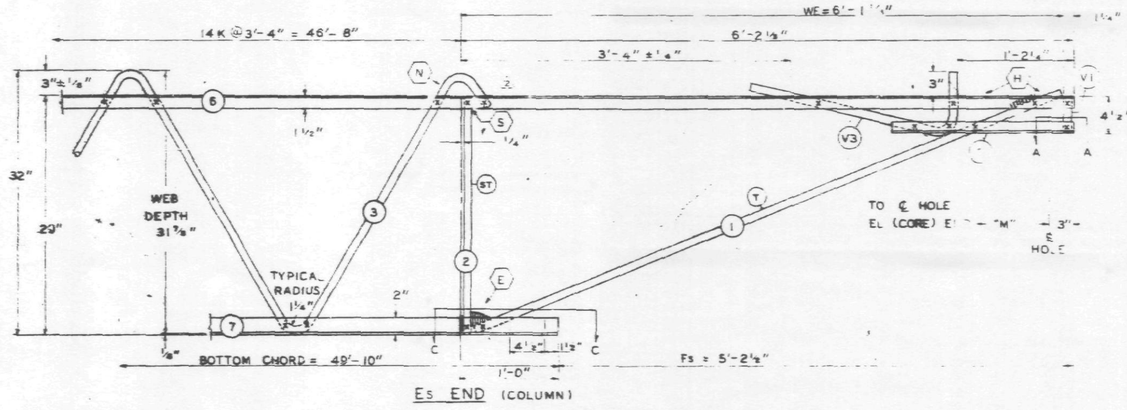
CL-1	CL-2	CL-3	CL-4	Fs
9'-6½"	22'-10½"	36'-2½"	49'-6½"	5'-2½"

	WEB "Wc" MK. V4 A	WEB "Wc" LENGTH	WEB "Wc" MK.	WEB "Wc" TYPE STEEL	WEB "Wc" PCS.	WEB "Wc" DIA	WEB "Wc" LENGTH	WEB "W.T." MK.	WEB "W.T." TYPE STEEL	WEB "W.T." PCS.	WEB "W.T." DIA	WEB "W.T." LENGTH
	4	2'-2"	4	A242	114	3/16	3'-0"					

STEEL TRUSS DETAILS FOR WORLD TRADE CENTER - N.Y.C. FOR THE PORT OF NEW YORK AUTHORITY			
FLOOR TRUSS C32T1B 59'-8½" OVERALL			
WORLD TRADE CENTER TOWERS A - B			
FABRICATION BY: LACLEDE STEEL COMPANY			
FABRICATED AT: MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB1-2 7-AB3-2	PLATE
APPROVED FOR FABRICATION BY: _____ FOR P.O.N.Y.A.	DATE 4/11/68	DRAWN BY L.A. DATE FEB. 24, 1969	
APPROVED FOR FABRICATION BY _____ FOR FABRICATOR	DATE	CHECKED BY J.R. WELL DATE FEB. 24, 1968	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	

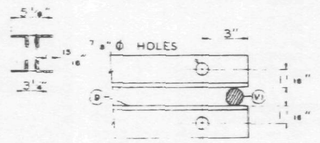


EL END (CORE)

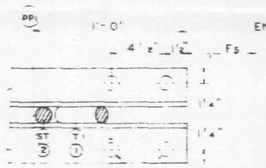


ES END (COLUMN)

TRUSS ELEVATION



SECTION A-A



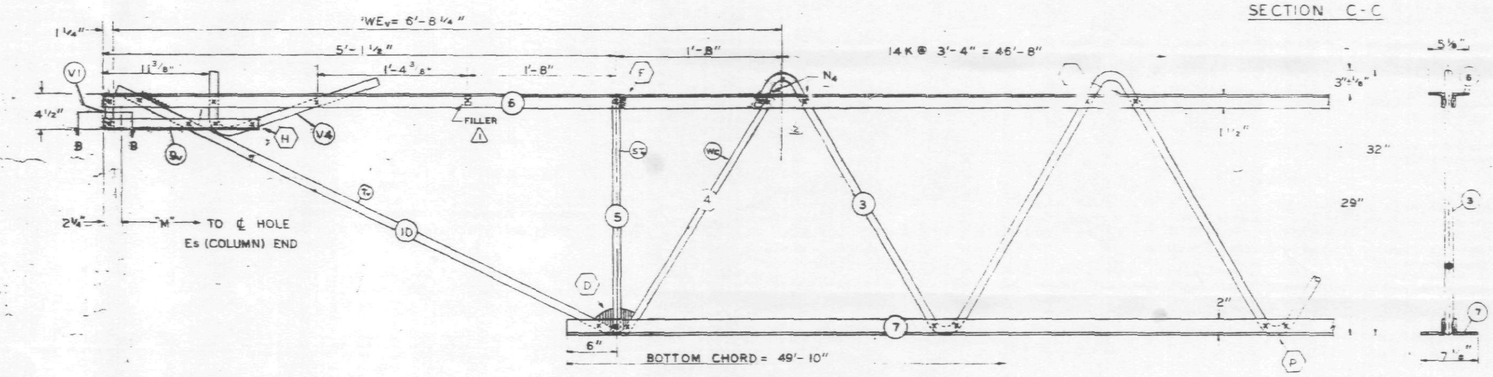
SECTION C-C

DAMPING UNIT CONNECTION PLATE ATTACHED TO BOTTOM CHORD TOOL END IN FIELD. ASSEMBLY BY CONTRACT WTC 223.00.

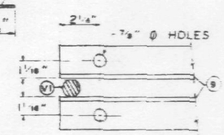
FABRICATION REQUIREMENTS		
CAMBER AT MIDSPAN		
DESIGN DEPTH		
PANEL "K"		
OVERALL LENGTH	59'-8"	3/8"
WEB DEPTH	7/8"	± 1/4"

ALL PANEL POINTS RESISTANCE WELDED EXCEPT ARC WELDS INDICATED AT SHADED AREAS AND AT BOTTOM CHORD WEB SPLICES (PPIII). ALL WELD DETAILS SHOWN ON SHEETS ST290 AND ST291.

SEE SHEET ST295 FOR V1, V3, & V4 DETAILS. LETTERS IN HEXAGON INDICATE WELD DETAIL, ie., (A). LETTERS AND NUMBERS IN SQUARES INDICATE RESISTANCE WELD STRENGTH IDENTIFIED IN THE QUALITY CONTROL PROGRAM, ie., F-2.



EL END (CORE)



SECTION B-B

NO.	DATE	REVISION
2	2-11-68	AS NOTED
1	3-10-68	FILLER AND WELD DETAIL

REF. DRWGS.

7-AB1-2	7-22-68
7-AB1-52	2-15-68
7-AB4-50	8-1-68
7-AB3-2	1-3-68
7-AB4-50.5	10-20-67
7-AB1-53	7-22-68

PAINT
LACLEDE ELECTROCOAT
RED NO. 10001

TRUSS DESIGNATION	TOP CHORD TWO ANGLES				BOTTOM CHORD TWO ANGLES				MAIN WEB "W"					FILLER	℄ "M" ℄ HOLES		TRUSS DATA	
	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	CHORD SIZE	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	NO. OF K	NO.	DIA.			
C32TIC-59'8"	6	A242	2"x1 1/2"x.25"	59'-9"	7	A36	3"x2"x.37"	49'-10"	3	A36	1.09	88'-1 1/2"	14 @ 3'-4" = 46'-8"	11	1.09	59'-2 3/4"		

COLUMN END

Es END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER							
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	MK. V1 TYPE STEEL	MK. V1 DIA.	MK. V1 LENGTH	MK. V3 TYPE STEEL	MK. V3 A	MK. V3 LENGTH		
	C32TIC-59'8"	9	A242	2"x1 1/2"x.25"	1'-10"	6'-11 1/4"	1	A242	1.14	6'-5"	2	A36	1.09	2'-4 3/8"	A242	1.14	4 3/8"	A242		9'-2"		

CORE END

EL END	TRUSS DESIGNATION	BEARING ANGLES				WE	DIAGONAL "T" STRUT				VERTICAL "ST" STRUT				END STIFFENER												WEB "WC"				WEB "WT"				
		MK.	TYPE STEEL	CHORD SIZE	LENGTH		MK.	TYPE STEEL	DIA.	LENGTH	MK.	TYPE STEEL	DIA.	LENGTH	MK. V1 TYPE STEEL	MK. V1 DIA.	MK. V1 LENGTH	MK. V2 TYPE STEEL	MK. V2 DIA.	MK. V2 LENGTH	MK. V4 TYPE STEEL	MK. V4 DIA.	MK. V4 LENGTH	MK.	TYPE STEEL	PCS	DIA.	LENGTH	MK.	TYPE STEEL	PCS	DIA.	LENGTH
	C32TIC-59'8"	9	A242	2"x1 1/2"x.25"	1'-6"	6'-8 1/4"	10	A242	1.14	5'-5 1/2"	5	A242	1.14	2'-4 7/8"	A242	1.14	4 3/4"	—	—	—	A242	1.14	2'-2 1/2"	4	A242	1	1.14	2'-10"	—	—	—	—	—

CHECK DIMENSION FOR TRUSS FAB.

LOCATION OF TRANS TRUSS				
CL-1	CL-2	CL-3	CL-4	Fs
9'-6 1/2"	22'-10 1/2"	36'-2 1/2"	49'-6 1/2"	5'-2 1/2"

STEEL TRUSS DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOOR TRUSS C32TIC 59'-8" OVERALL
WORLD TRADE CENTER TOWERS A-B

FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT: MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR P.D.N.Y.A. DATE: 2/28/69
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE:
DETAILED BY:
DESIGN DRAWING NO. 7-AB1-2 7-AB3-2 - PLATE
DRAWN BY: J.S. DATE: FEB. 25, 1968
CHECKED BY: J.R. DATE: FEB. 26, 1968
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. ST-2

WCI = 131.1.

#900 — 999

is missing.